

Mica Capacitors

MARKED . ''AEROVOX'' IT'S

QUALITY IT'S

CAPACITOR

"POSTAGE-STAMP" MOLDED-IN-BAKELITE MICA CAPACITORS

Wide choice of designs, sizes, mountings, terminals offer the cormountings, terminals offer the cor-rect Aerovox unit for every appli-cation, as listed. Units built of selected mica and foil; molded bakelite casing impervious to mois-

ture, heat, mechanical damage. Micrometer test for mica thickness maintains capacity values for long life. Capacity values indicated on units.

Type 1467



Compact, size 33 in. square, provided with wire leads. 1000 volts D.C. Test -- 500 volts D.C. Wkg.

Can	List	Net	Can.		Net
Mfd.	Price	Price	Mfd.	Price	Price
.0005	\$0.25	\$0.15	.004	\$0.55	\$0.33
.00075				.60	.36
.001			.006	.75	
.0015			.007*	.90	
.002	.40	.24	.008*	1.00	.60
.0025	.45	.27	.009*	1.10	.66
.0025	.50	.30	01*	1.20	.72
.003	.50	.30	.01		

Size 25/32" x 25/32" x 9/32" or (53/64" x 53/64" x 21/64" for units that have an asterisk [*1]. Standard Tolerance ±20%; for ±10% add 10% to list prices; ±5% add 20% to list price; ±3% add 40% to list price; ±2% add 75% to list price;

Type 1468



Midget size \$2" x \$2" x \$2" provided with wire leads. 1000 volts D.C. Test — 500 volts D.C. Wkg.

Can.	List	Net	Cap.	List	Net
MEd	Price	Price	Mfd.	Price	Price
00000	180.25	\$0.15	.00015	\$0.20	\$0.12
00000	5 .25	.15	.0002	.20	.12
00001	25	.15	.00025	.25	.15
.00002			.0003	.25	.15
.00004			.00035		.15
.00005			.0004	.25	.15
.00007			.0005	.25	.15
.0001			.00075	.25	.15
.0001			.001	.30	.18

Size 25/82" x 25/82" x 9/32". Standard Tolerance ±20%; for ±10% add 0% to list price; ±5% add 20% to list price; ±3% add 40% to list price; ±2% add 75% to list price.

Type 1478



With wire leads. Size $1\frac{1}{18}$ " x $\frac{7}{16}$ " x $\frac{3}{16}$ ". 1000 volts D.C. Test—500 volts D.C. Working.

Cap. Mfd. .0005 .00075	List Price \$0.30 .30 .40	Net Cap. Price Mfd. \$0.18 0015 .18 .002 .24	List Price \$0.45 .50	
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Type 1441W



With wire leads, Size 1' 1000 volts D.C. Test—500 volts

17.0.	MOLKIN	ĸ.			
Cap.	List		Cap.	List	Net
Mfd.	Price	Price	Mfd.	Price	Price
.0005	\$0.25		.003	\$0.50	\$0.30
.00075	. 25	.15	.004	.55	.33
.001	.30		.005	.60	
.0015	.30	.18	.006	.75	.45
.002	.40	,24	.008*	1.00	.60
.0025	.45	.27	.01*	1.20	.72
*5/16	" thick.	Al1	others	3/16"	thick,

MOLDED-IN-BAKELITE MICA CAPACITORS Type 1460



Popular type molded-in-bakelite mica capacitor. Size 1% " x 5%". Two soldering lug terminals. 1000 volts D.C. Test—500 volts D.C. Working.

Cap.	List		Cap.	List	Net
Mfd.	Price	Price	Mfd.	Price	Price
.0001	\$0.20		00075		\$0.15
.00015	.20		.001	.30	.18
.0002	. 20	.12	.0015	.30	
.00025	.25		.002	.40	
.0003	.25	.15	.0025	.45	.27
.00035	.25	.15	.003	.50	.30
.0004	.25		.004*	.55	
.0005	.25	.15	.005*	.60	.36

600v D.C. Test-300v D.C. Working; 9/32" thick, all others 17/64".

PORCELAIN-CASED MICA CAPACITORS

Ideal for those higher - frequency applications.
Encased and
hermeticallysealed in glazed
porcelain case.
Heavy duty
terminals. Powapplications



terminals. Power loss due to dielectric absorption reduced to a minimum. Units operate at full load without heating ap. Dimensions: 3½" between mounting holes, 4" overall by 3"

Type 1991-2000v. Max. D.C.

Cap. List Net Mfd. Price Price No. 12 \$14.75	ifd. Price Price
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Type	1992	—3500v.	Max. [o.c.
.001 .0015 .002 .003		\$3.90 .005 3.90 .01 4.80 .02 5.25 .05	\$10.50 16.00 16.00 18.50	9.60 9.60

Туре	1993	5000v.	Max. [o.c.
002	\$8.75	\$5.25 .005	\$10.50	
003	9.50	5.70 .01	15.25	

Type	1994	—7000v	. Max. I	o.c.
.0005		\$3.90 .003		
.001 .0015	7.25 8.00	4.35 .005 4.80 .01	11.00 15.25	6.60 9.15
002	9.50	5.70		

Туре	1995	—10000v.	Max. I	o.c.
.002		\$6.15 .005	\$14.50	\$8.70

Type	1996	—12500v.	. Max. D.C.	Ľ
.00005	\$8.00	\$4.80 .001	\$8.00 \$4.80	Γ.
.0001 .00025	8.00 8.00	4.80 .0015 4.80 .002	\$8.00 \$4.80 9.50 5.70 11.00 6.60 15.25 9.15	ŀ
.0005	8.00	4.80 .003	15.25 9.15	1

HIGH-VOLTAGE MOLDED-IN-BAKELITE MICA CAPACITORS



Type 1450

1000v D.C. Test-600v D.C. Work.
Intended for the more critical service of low-powered transmitting service of low-powered transmitting circuits, buffer stages, power amplifiers, and laboratory equipment, etc. Non-magnetic parts are used to reduce r.f. losses to minimum, and heavy terminals provide minimum r.f. and contact resistance. Intended for point-to-point wiring, being supported entirely by its soldered connections. 1½" x 1½".

*** or **, " thick (see below).

∱a″or	3/4	thick	(see	nerow,		
Cap.	List			List	Net	
Mfd.	Price	Price.		Price	Price	
00025	\$0.45	\$0.27	.005	\$0.70	\$0.42	
.0003	.45	.27	.006	.80	.48	
00035	.45	.27	.008	.90		
0004	.45	.27	.01	1.00		
0005	.45	.27	.015*	1.35	-81	
.001	.50	.30	.02*	1.45	.87	
.0015	.55		.025*	1.75	1.05	
.002	.55	.33	.03*†	2.05	1.23	
0025	.60		.04*†	2.65	1.59	
003	.70		.05*†	3.30	1.98	
004	.70	.42				

*600v D.C. Test-300v D.C. Working. 13/4" thick. All others 5/16".

Types 1455-57



Size 1 1/4 " x 123" x 31"
Types 1455-57, have insulated mounting holes, independent of soldering lugs, for connections. mounting holes, independent of soldering lugs, for connections. 1½" spacing between mounting hole centers. If 1½" spacing is preferred specify Types 1445-47. Large meter-mounting brackets permitting use of this type of unit for shunting meter windings may be obtained at 45c added to list price. Specify by adding suffix (A) to type number. Small brackets are also available at 25c additional. Specify by suffix (E). Both brackets have universal slots for either mounting hole spacing. Standmounting hole spacing. Standard tolerance ±20%; for ±10% add 10% to list price; ±5% add 20%; ±2% add 75%. Stand-

		Type	1455		
1000v	D.C.	Test-		D.C. V	Vork.
Cap.	List	Net	Cap.	List	Net
Mfd.	Price	Price	Mfd.	Price	Price
.00005	\$0.70	\$0.42	.0025	\$0.90	\$0.54
.0001	.70	.42	.003	1.00	.60
.00015	.70	.42	.004	1.00	.60
.0002	.70	.42	.005	1.00	.60
.00025	.70	.42	.006	1.20	.72
.0003	.70	.42	.008	1.10	.84
.00035	.70	.42	.01	1.60	.96
.0004	.70	.42	.015	1.80	1.08
.0005	.70	.42	.02	2.20	1.32
.001	.70	.42	.025	2.65	1.59
.0015	.70	,42	.03	2.95	1.77
.002	,80	.48			
		Type	1456		

.002	,80	.48		
		Type 1456		
2500v	D.C.	Test-1250v	D.C. V	
.00005	\$1.00	\$0.60 .0015		\$0.96
.0001	1.00	.60 .002	1.90	1.14
.00015	1.00	.60 .0025	2.00	1.20
.0002	1.60	.60 .003	2.10	1.26
00025	1.00	60 .004	2.10	1.26
.0003	1.00	.60 .005	2.40	1.44
.00035	1.00	.60 .006	2.40	1.44
.0004	1.00	.60 .008	3.10	1.86
.0005	1.00	.60 .01	3.90	2.34
.001	1.25	.75		

		Туре	1457		
5000v				D.C. V	Vork.
.00 75	\$1.25	\$0.75	.0004	\$1.65	
000075	1.25	.75	.0005	1.70	
.0001	1.25	.75	.001	2.05	1.23
00015	1.30	.78	.0015	2.70	1.62
.0002	1.40	.84	.002	3.10	1.86
.00025	1.50	.90	.0025	3.45	2.07
.0003	1.55	.93	.003	3.80	2.28
00035	1 60	96	Į.		



Types 1650-54

Heaviest-duty molded in bakelite mica capacitors of the AEROVOX line. Provided with threaded
holes taking the roundhead screw
terminals. Also available with
plain holes through which screws
or rods may be slipped. Same price
as 1650 series, but specify 1650A,
etc. when latter is desired. In or
if thick (see * below). Types
1650, 1651 and 1652 are supplied
in brown bakelite. Types 1653L
and 1654L are supplied only in
low-loss (yellow) XM Bakelite.
Standard tolerance ±20%; for
±10% add 10% to list price;
±5% add 20%; ±2% add
75%.

Type 1650 1000v D.C. Test-600v D.C. Work. 700v A.C. Test-350v A.C. Work.

Cap.	List		Cap.	List	Net Price
Mfd.	Price	Price		Price	
.00005	\$0.85	\$0.51	.004	\$1.20	\$0.72
.0001	. 85	.51	.005	1.20	.72
.00025	.85	.51	.006	1.40	.84
.0003	.85	.51	.008	1.65	.99
.00035	. 85	.51	.01	1.95	1.17
.0004	.85	.51	.015	2.25	1.35
.0005	.85	.51	.02	2.60	1.56
.001	.85	.51	.025	3.20	1.92
.0015	.90	.54	.03	3.45	2.07
.002	.90	.54	.04*	4.50	2.70
.0025	1.00	.60	.05*	5.35	3.21
000	1 00	70	0.04	6 90	3 72

Type 1651 Took 1050 D.C. Work 0500... D.C

23004	D.C.	Test-	T520A	D.C.	AAOIK
1750v	A.C.	Test-	875v	A.C.	Work
.00005	\$1.00	\$0.60		\$2.20	
.0001	1.00	.60	.004	2.20	
.00025	1.00	.60	.005	2.40	1.44
.0003	1.00	.60	.006	2.40	1.44
.00035	1.00	.60	.008	3.10	1.86
.0004	1.00	.60	.01	3.90	2.34
.0005	1.00	.60	.015	4.65	2.79
.001	1.25	.75	.02*	5.45	3.27
.0015	1.60	.96	.025*	6.10	3.66
.002	1.90		.03*	6.40	3.84
.0025	2.00	1.20			
	_,,,,				

Type 1652

5000v D.C. Test-2500v D.C. Work. 3500v A.C. Test-1750v A.C. Work. \$1.25 \$0.75 .001 1.25 .75 .002 1.30 .78 .0025 1.40 .84 .003 1.50 .90 .004 1.55 .93 .005 1.60 .96 .006 1.65 .99 .008* 1.70 1.02 .01* \$2.05 \$1.23 2.60 1.56 3.10 1.86 3.45 2.07 00005 \$1.23 1.56 1.86 2.07 2.28 2.61 2.82 2.91 3.18 3.42 000075 0000 .00015 .0002 3.80 4.35 4.70 4.85 5.30 5.70 00025

Type 1653L

0005

7500v D.C. Test-3750v D.C. Work. 5250v A.C. Test-2625v A.C. Work.

32304	A.U.	1631-20231	7.0.	TOIR.
.00005	\$2.65	\$1.59[.0004	\$4.70	\$2.82
.000075	2.90	1.74 .0005	5.20	3.12
.0001	3.05	1.83 .001	6.15	3.69
.00015	3.30	1.98 .0015	8.10	4.86
.0002	3.45	2.07 .002	9.20	5.52
.00025	3.80	2.28 .0025	10.30	6.18
.0003	3.90	2.34 .003*	11.40	6.84
00035	4.60	2.76		

Type 1654L

10000v D.C. Test-5000v D.C. Work.

70004	A.U.	1636-	JJ004	7.0.	701 K.
.00005 .000075	3.30 3.70	2.22	.00035	6.00 6.15	
.00015	4.05		.0005	7.90	4.74
.0002	5.00		.001*	10.00	6.00
.00025	5.45	3.27			
*3/4"	thick.	All o	thers 7	/16".	



Mica Capacitors

IF IT'S MARKED

"AEROVOX"

T'S A QUALITY

CAPACITOR

SILVERED MICA CAPACITORS

For most critical applications where precise capacity values must be attained and maintained, AERO-VOX silvered mica units are generally available. Encased in red molded XM bakelite. Similar in external appearance to standard takelite molded mica units.

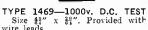
Unique construction. Only plus .0022 per degree F.-a remarkably low temperature coefficient. Excellent retrace characteristics. Practically no capacity drift with time. Exceptionally high "Q". Mechanically protected against physical damage and changes in electrical characteristics due to varying atmospheric conditions. Wax impregnated externally. Ideal for use in circuits where inductance and capacity product must remain constant under all operating conditions. Specifically designed for use in push-button tuning, oscillator padding circuits, fixed tuned circuits, and as capacitance standards, etc., where accuracy and stability are of prime importance.

Standard tolerance $\pm 5\%$. For $\pm 20\%$ deduct 10% from price. For $\pm 10\%$ deduct 5%. For $\pm 3\%$ add 10%. For $\pm 2\%$ add 15%. For $\pm 1\%$ add 25%.



TYPE 1464—1000v. D.C. TEST Size $\frac{25}{2}$ in. square. Provided with wire leads. *600v. D.C. test.

Mfd.	Price	Price	Mfd.	Price	Price
.00075		\$0.54			\$0.81
.0008	.95 1.00		.0025	$\frac{1.80}{2.05}$	1.08
.001	1.10	.66	.004*	2.15	1.29
.0015	1.35	.81	.005*	2.25	1.35



wire it	aus,				
.000005	\$0.55	\$0.33	.00015	\$0.45	\$0.27
.00001	.40	.24	.0002	.45	.27
.000025	.40	.24	.00025	.45	.27
.00004	.40	.24	0003	.55	.33
.00005	.40	.24	.00035	.60	.36
.00007	.40	.24	.0004	.65	.39
.000075	.40	.24	.0005	.70	.42
.0001	. 10	.24			



TYPE 1479—1000v. D.C. TEST Size $1\frac{1}{16}$ " x $\frac{7}{16}$ ". Provided with wire leads.

.0001	\$0.40	\$0.24	.0005	\$0.70	\$0.42
.00015	. 45	.27	.0007	.85	.51
.0002	.45	.27	.00075	.90	.54
.00025	.45	.27	.0008	.95	.57
.0003	.55	.33	.0009	1.00	.60
.00035	.60	.36	.001	1.10	.66
.0004	.65	.39			



Commercial Grade

MICA TRANSMITTING CAPACITORS

- Extra-heavy-duty Capacitars far

 Cammercial Cammunication Campanies
- Braadcasters
- Builders of Quality Radio and Electronic Equipment
- Amateurs, Experimenters

With these capacitors Aerovox is contributing its share towards narrowing still more the small remaining gap between professional and amateur radio practices.

Due to the normally limited demand for these extra-heavy-duty mica capacitors, as well as the considerable number of capacitance and voltage ratings in which they are made, this line is made to special order. However, your Authorized Aerovox Jobber is now able to order these commercial-grade capacitors for you.

Consult your Aerovox Jobber for specifications and quotations.





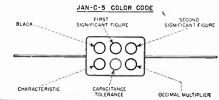








MICA CAPACITOR COLOR CODES



Color	Figure or Multiplier	Character- istic Letter	Tolerance	Color	Figure or Multiplier	Character- istic Letter	Tolerance
Black	0	A	20% (M)	Blue	6	G	
Brown	1	B	-0 /0 (Violet	ž	-	
Red	2	č	2% (G)	Gray	6		
Orange	3	Ď	,	White	ő		
Yellow	4	Ē	* * * *		٥,	• •	
Green	2			Gold	.1		D 10 840,
Crreen	υ	F		Silver	.01		10% (K)

CHARACTERISTIC LETTERS

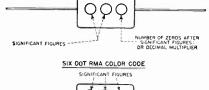
Char- acter- istic	a	Temperature Coefficient Parts/Million/ deg. C	Maximum Capacitance Drift (F-6)	Verification of Characteristics by Production Test
A	Not specified	Not specified	Not specified	Not required
В	As specified	Not specified	Not specified	Not required
C	in D-5c (1)]	200 to +200	0.5 per cent	Not required
D	**	—100 to ∔100	0.2 per cent	Not required
E	"	0 to +100	0.05 per cent	Not required
F	14	0 to +50	0.025 per cent	Required
G	**	0 to -50	0.025 per cent	Required

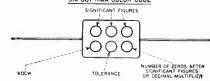
17	**	-100 40 +100		per cent	Not required
F	11	0 to +100	0.05	per cent	Not required
P.		0 to +50	0.025	per cent	Required
G	**	0 to50	0.025	per cent	Required
				per cent	100/1011001
Type No.	AEROV	OX No. & Remarks	Type No.	AEROV	OX No. & Remarks
CM20	14	68, 1469	CM56	14	52A thin
CM 25		78, 1479	Civiso		
CM30		64, 1467	CM56		.0043 mfd., incl.)
CM35		164, 1467	CMIDO		51A thin
			0.4450	7400.)	o .013 mfd., incl.)
		to .0062 mfd. incl.)	CM56		50A thin
CM 40		141W or 1441 WR			.003 mfd., incl.)
(500 v	. DCW up	(o .0082 mfd. incl.)	CM 60	16	52 thick
CM 45	14	47 thin		(up to	.012 mfd., incl.)
	(up to	.0018 mfd., incl.)	CM60		51 thick
CM45		46 thin			.033 mfd., incl.)
		.0036 mfd., incl.)	C-M 60	16	50 thick
C M 45		45 thin	C-11100		.047 mfd., incl.)
011110			CM61		
CM50		to .01 mfd., incl.)	CWIGI		52A thick
CHIJU		47 thick			.012 mfd., incl.)
		.0051 mfd., incl.)	CM6I		51A thick
C M 50		46 thick		(.018 to	.033 mfd., incl.)
		to .011 mfd., incl.)	CM61	16	50A thick
C-M50	14	45 thick		(.036 to	.047 mfd., incl.)
	(.012 to	.027 infd., incl.)	CM65	15	70
C M 55	16	52 thin	CM70	15	
	(up to	.0043 mfd., incl.)	CM75	19	
CM55		51 thin	CM80	19	
		o .013 mfd., incl.)	CM85	19	
CM55		50 thin	C-M90	19	
011100		033 mfd., incl.)			
	(.010 10	7 .000 mid., mer.)	C (41 9.7)	19	i U
		_			

RMA COLOR CODE

THREE OOT RMA COLOR CODE

USED FOR 500 VOCW CAPACITORS WHOSE TOLERANCE IS GREATER THAN 10%





	nificant Figu No. of Zeros or Decimal			Significant Figure, or No. of Zeros, or Decimal			
Color	Multiplier	VDCW	Toleranco	Color	Multiplier	VDCW	Tolerance
Black	0			Violet	7	700	7%
Brown	1	100	1%	Gray	8	800	8%
Red	2	200	2%	White	9	900	9%
Orange	3	300	3% 4% 5%	Gold	.1	1000	5%
Yellow	4	400	1%	Silver	.01	2000	10%
Green	5	500	5%	None		500	20%
Blue	6	600	6%	1		500	20 70



"AEROVOX" IT'S A QUALITY 1 F IT'S MARKED CAPACITOR

AEROVOX INTERFERENCE FILTER SELECTOR



TYPE ANL-37

Plugs between interfering de-

TYPE ANL-37

AEROVOX Type IN-23



For elimination of in-For elimination of interference caused by neon lamps or fractional horsepower motors. Mounting bracket for attaching to neon fixture (one eliminator needed for each fixture) or for attaching to frame of motor. Flexible leads for connecting across motors such as in hairdriers, fans, mixers, etc. .5-.5 mfd. 1 x 2 ½ in.

TYPE IN-23

List Price \$1.25 Net Price \$0.75

AEROVOX Type IN-27



Simple, inexpensive noise filter. Inserted between set and outlet

between set and oiltiet when interference is slight. Also used with appliance causing low-intensity interference. House wiring and power line. Size 1 % x 1 ½ inches.

TYPE IN-27 List Price \$1.50 Net Price \$0.90



List Price \$2.00

AEROVOX Type IN-28

Intended for cases where ground is considerable disof application.

Most efficient
directly on interby bracket. Size

Net Price \$1.20

when mounted device 2 inches. TYPE IN-28

AEROVOX Type IN-29



Provides additional fil-tering action over IN-27 and IN-28. Espe-cially effective for 27 and IN-28. Espe-cially effective for local sources of in-terference of variable character but strong intensity. Very effec-tive for electric razor and other vibrating devices. Plugs between device and line. Size 1 % x 3 inches.

TYPE IN-29

List Price \$1.75 Net Price \$1.05 | List Price \$7.50 Net Price \$4.50 | 1150

rings between interfering device and outlet. Selector switch adjusted until noise is eliminated or minimized. Dial indicates which type filter to use. Handwhich type fifter to use. Handsome, sturdy metal cabinet. Compartment contains necessary test leads and attachment plugs and clips. Size 5 ½ x 5 ½ x

Dealers Net Price......\$17.50

AEROVOX Type IN-30



Similar to IN-29 but with additional inductance. Handles more severe inter-ference. Plugs between set and outlet. or preferably between noisy appliance and outlet. Size 1 3% x 3 inches.

TYPE IN-30 List Price \$2.50 Net Price \$1.50

AEROVOX Type IN-31



Plugs in between attachment cord and electric out-let, either of set or preferably at appliance. Additional inductance for better filter-ing. Works best mounted bracket directly on interfering appliance. Size 1% x3 inches.

TYPE IN-31

List Price \$3.00 Net Price \$1.80



AEROVOX Type IN-42

Designed for use in the more serious cases of radio interference from power lines and appliances. Provided with inductance as well as capacitance for thorough filtering action. Plugs into electric outlet. Radio set or interfering device plugs into receptacle of the filter. Recommended for use between interfering device and power line. Size 2½" x 3¾". Provided with mounting ring. Rated at 6 amps. for 110-220v. A.C..

TYPE IN-42

AUTO-RADIO CONDENSERS

SUPPRESSOR CONDENSERS



Туре	Cap. Mfd.	List Price	Net Price
1120	1.0	\$0.90	Price \$0.54
1140	0.5	.65	.39

Dual-Section SUPPRESSOR CONDENSERS



ı			
	Cap.	List	Net
Туре	Mfd.	Price	Price
Type 1141	.55	\$1.25	\$0.75

MOTOROLA Replacement Condenser



Consists of two Aerovox Type 1466 Mica Capacitors rated at .0008 mfd., 2500 volts D.C. Test.

List	Price	(complete)\$0.65
Net	Price	(complete) \$0.65

SUPPRESSOR CONDENSERS FOR FORD AUTO RADIOS



Гуре	Cap. Mfd.	List Price	Net Price	
1144	.5	\$0.65	\$0.39	



For 1936 Models List Net Mfd Price Price \$0.85 \$0.51 . 5

TUBULAR VIBRATOR CONDENSERS

Aerolene Impreanated



	Cap.	List	Net
Туре	Mfd.	Price	Price
1688	.005	\$0.55	\$0.33
1688	.006	.55	.33
1688	.01	.60	.36
1688	.02	.60	.36

GAS GAUGE FILTER CONDENSER

Type 1143-G



Cap.	List	Net
Mfd.	Price	Price
.05	\$0.65	\$0.39

AMMETER CONDENSERS



	Cap.	List	Net
Туре	Mfd.	Price	Price
1160	.5	\$0.65	\$0.39

OIL GAUGE FILTER CONDENSER



Type 1142-0

Cap.	List	Net
Mfd.	Price	Price
.25	\$0.60	\$0.36

Type

MIDGET

TUBULAR METAL-CASED

"HYVOL" CAPACITORS

Type 38

These units are hermetically-sealed and are exceptionally compact. Originally designed as alternates for mica capacitors but have since be-

mica capacitors but have since be-come a standard item in the Aero-vox oil-filled capacitor line. Not only used as replacements in exist-ing equipment, but are especially suitable for newly-designed equip-ment particularly where allowable weight of the finished assembly and allotted space is at a mini-mum. Despite unusual ultra-small

TUBULAR PAPER CAPACITORS



Type 84

Aerovox cartridge capacitors are especially desirable for use where high grade units are required at low cost. They are compact, non-inductively wound and sealed in wax impregnated paper tubes with wax filled ends for longer life and

protection against moisture.

Types and D.C.W. Voltages

	Type 48 400v.	34	Туре 600	684 v.
Cap. Mfds001 .002 .003 .004 .005 .006 .0075 .02 .025 .03 .05 .06 .075 .1	List Price \$0.233 .233 .233 .233 .233 .233 .233 .233	Sug. Resale Price \$0.14	List Price \$0.23 .23 .23 .23 .23 .23 .23 .24 .27 .27 .27 .27 .27 .32 .36 .41 .45 .50 .50 .50 .50 .113	Sus Resale Price \$0.14 .14 .14 .14 .16 .16 .16 .16 .19 .22 .25 .25 .25 .27 .30 .43 .43 .43 .44 .44 .46 .46 .46 .46 .47 .47 .47 .47 .47 .47 .47 .47 .47 .47
T	ype 108 1000v.	34	Туре 1	684 v.
Cap. Mfds001 .002 .003 .004 .005 .006 .0075 .02 .025 .03 .05 .06 .075 .05 .06 .075 .06 .075 .075 .075 .075 .075 .075 .075 .075	List Price \$0.455.455.455.455.455.455.455.455.455.45	Sug. Resale Price \$0.27 .27 .27 .27 .27 .27 .27 .27 .27 .27	List 17 fice \$0.50 0.50 0.550 0.550 0.554	Sug. Resale Price \$0.30 .30 .30 .30 .32 .32 .32 .32 .32 .32 .32 .34 .43

METAL-CASED **Ultra-Compact** PAPER CAPACITORS

Type 80 Ultra-compact heavyduty capacitors. Wax-

duty capacitors. Wax-impregnated, wax-filled. Used as replacements in sound equipment, high power radio receivers, electronic devices, and communication equipment. Housed in a rust-proof container with sol-dering terminals conveniently lo-cated cated.

Type 1000 TOOO D.C. Work

	WOLK.	00 V. D.C.	6 1000-100	ıур
ď	Net	List	Size-Ins.	Cap.
A	Price	Price	D. W. L.	Mfds.
	\$1.35	\$2.25	Hx1 1/4 x2	.5
	1.89	3.15	1 1/4 x1 1/4 x2	1.0
	2.91	4.85	2 ½ x1 ¼ x2	2.0
11	4.71	7.85	2 3% x 2 1 x 2	4.0

DRAWN-CASE OIL FILLED "HYVOL" CAPACITORS



For applications requiring a compact superior grade oll-impregnated, oll-filled capacitor. Non-inductive paper sections encased in a one-piece drawn metal case with soldered bottom plate for hermetic seal. Absolutely immersion-proof terminal assembly. Meets severe operating conditions encountered in aircraft, police, broadcast p.a. and other types of communications equipment.

TYPE 430-400 V.D.C.W.

TYPE 430-400 V.D.C.W.	and allotted space is at a mini-
Cap. List No	et mum. Despite unusual ultra-small
Mfds. LxWxH Price Pri	ice size for oil-impregnated oil-filled
.05 134x1 x 34 \$1.75 \$1.	05 capacitors, constructional and elec-
	20 trical characteristics meet many
1.25 1.4×1.3 2.25 1.	35 of the exacting conditions to which
.5 1% x1 x % 2.40 1.	44 molded-in-bakelite mica capacitors
.75 2-x14x 34 9 70 1	62 are normally subjected. Type 38
1.0 2 x134x 13 2.85 1.	
2.0 2 x2 x1 1/8 3.60 2.	
.0505 1%x1 x 18 2.75 1.	65 with outer insulating tube.
134x1 x 13 3.00 1.1	80 With outer insulating tube.
.2525 134x14x 3/8 3.25 1.9	95 Type 338T-300v D.C. Working
.55 2 x1% x 13 3.75 2.	25 0 0 7
1.0-1.0 2 x2 x1 1/8 4.50 2.3	
.050505 $1\% \times 1 \times \frac{13}{16}$ 3.50 2.	
1 - 1 - 1 $1 % x 1 x % 3.65 2.1$	
.252525 2 x134 x 78 4.00 2.	
Type 630 600 D.O. W	0.003 $\frac{5}{16} \times 1\frac{3}{16}$.85 .51
Type 630—600v D.C. Working	$\frac{1}{16}$.005 $\frac{3}{16}$ x $1\frac{3}{16}$.85 .51
44.00	
	18 118 .00
.5 134x1 x 13 2.80 1.6	
.75 2 ₁₂ x1½x % 3.20 1.5	
1.0 2 x134 x % 3.40 2.0	
2.0 2 x2 x1 3 4.55 2.7	
.0505 1%x1 x 13 3.30 1.9	18 118 00.00 40.51
.11 1%x1 x 13 3.35 2.0	16 4 4 6 .55
.2525 184x114x % 3.40 2.0	16 116 .50 .57
.55 2 x1¾ x 7 3.90 2.3	
1.0-1.0 2 x2 x1 3 4.80 2.8	
.050505 1% x1 x 1 3 3.70 2.2	2 .01 16 x 1 16 .95 .57
.111 1%x1 x 15 3.80 2.2	18
.2525-,25 2 x134 x 78 4.30 2.5	8 Tune 639T (00: D.O. Want)
	Type 638T—600v D.C. Working
Type 1030—1000v D.C. Workin	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
.25 1%x1 x 13 2.95 1.7	7 .005 16 x 118 .95 .57

Type 1030			C. Wo	rking
.05	134 x1	X 3/4	\$2.75	\$1.65
.1	1% x1	x 3/4	2.85	
.25	1% x1	x +3	2.95	
.5	216114	x %	3.20	
.75	2 x13/	x %	3.80	2.28
1.0	2 x1%	x 1	4.00	2.40
.0505	1% x1	x 13	3.50	2.10
.11	134 x1	x 13	3.60	2.16
	21x14		3.80	2.28
.55	2 x1%	x 1	4.95	2.97
.050505	134 x 1	v 13	3 85	2 31

					1300	4000-1969	D.C. YY	orking
pe 1030	-1000v		Wor	king	.001	$\frac{7}{10} \times 1\frac{3}{16}$	\$0.95	\$0.57
95	134 x1 x	34 \$2	.75 \$	1.65	.002	$\frac{7}{16} \times 1^{3}_{16}$.95	.57
1		3/4 2	.85	1.71	.003	16 X 1 18	.95	.57
5	1% x1 x	18 2	.95	1.77	.005	7 x 1 3	.95	.57
,	216x1%x		.20	1.92	.006	$\frac{7}{16} \times 1_{16}^{3}$.95	.57
5	2 x134x	% 3.	.80	2.28	.0075	$\frac{1}{16} \times 1\frac{3}{16}$.95	.57
7	2 x1% x	1 4.	.00	2.40	.01	75 x 1 3	.95	.57
505	1% x1 x	13 3.	50	2.10		10 10		
1	1% x1 x	13 3.	60	2.16	-	222 200		
2525	21-x14x		80	2.28	Type	838T800v	D.C. W	orking
5	2 x1%x	1 4.	95	2.97	.001	1 X 1 3	\$1.05	\$0.63
050505	134 x1 x	13 3.	85	2.31	.002	7 x 1 3	1.05	.63
11	134 x1 1/4 x		15	2.49	.003	Ta x 1 13	1.05	.63
52525	2 x2 x1	5.	00	3.00	.005	$\frac{7}{16} \times 1^{\frac{3}{16}}$	1.05	.63

UNCASED PAPER CAPACITORS Type UC



Non - inductively wound high grade, ultra-compact, uncased sections, neatly shaped and wrapped in black varnished paper with ends sealed with pitch and provided with insulated wire leads, eight inches for replacement use

long. Designed for replacement use in filter block repair work.

1	in fil	ter	ploc	re.	paır	work.	-	ŀ	
ľ	TYPE UC200-200 V.D.C.W.								
ľ	Cap.		Size			List	Net		
e;	Mfd.	L.	x W	. X		Price	Price		
5	.1	2	X 2	4 X	1/4	\$0.65	\$0.39		
9	.25	-2	x 1	X	16	.70	.42		
L	.5	2	x 1	X	1/2	.75	.45		
	11 0	• 9	v 1 3	1. 4	1.1	1.00	60	ı.	

TYPE UC400-400V.D.C.W. x % x ¼ x1 x % x1 x % x1 5 x 16 x1 % x 16 2 \$0.75 \$0.45 .48 .51 2 2 2 .80 .85 25 2 x1 x % 2 x1 ½ x ½ 2 x1 ½ x ½ 3 ¼ x1 ½ x % 4 % x1 % x1 ½ $\frac{1.0}{2.0}$ 1.15 3 00

TYPE UC600-600 V.D.C.W. .25 2 $\times 1\frac{1}{18} \times \frac{8}{16}$.5 2 $\times 1\frac{9}{18} \times \frac{11}{16}$ 1.0 3 4 $\times 1\frac{9}{8} \times \frac{11}{16}$ 2.0 3 4 $\times 1\frac{9}{18} \times 1\frac{11}{16}$ \$0.90 \$0.54 .63 1.05 1.40

	4.0	4 %	gxı	% X I	/8	3,8	0	2.28
rice).39		PE	uc	1000	-10	00 1	/.D.0	.w.
.42				7⁄8 x				\$0.93
.45	1.0	4 3	% x1	% x1		2.3		1.38
.60	2.0	4 3	8 x 2	1/4 x1	7/8	3.8	30	2.28

TUBULAR CAPACITORS

OIL-IMPREGNATED OIL-FILLED Type 89

Immersion-proof, oil-impregnated, oil-filled impregnated oil-filled units in handy, space-saving tubular form. Ideal for use in vibrator applications, coupling and bypass functions in transmitters, high-voltage amplifiers, in r.f. by-pass circuits, interference eliminators for motors and generators, and in test equipment. Fully sealed against oil leakage or moisture penetration. Case is insulated, not connected to the capacitor section. Mounting strap and outer insulating tube are supplied.

Types and D.C.W. Voltages 489-400 | 689-600 List Net | Price Price Price | List Net | List Net | List Net | List Net | S1.00c \$0 689-600 Price Pr Price Mfd. 015 List Net \$1.00c \$0.60 1.00b 1.05c .60 .63 1.05c 1.10c .63 0.2 .66 .66 .72 .75 1.02 .63 .63 1.05c 1.05c 1.10c 1.10d 04 075 1.10d 66 1 20f 1.15d 1.45f .69 .87 1.25f 1.70h

5 .	1.70k	1.02		
1	089-10	00	2089-2	2000
006	\$1.10a	\$0.66	\$1.25e	\$0.75
0075	1.10b	.66	1.25e	.75
01	1.10c	.66	1.25e	.75
015	1.20c	.72	1.30f	.78
02	1.20c	.72	1.35g	.81
03	1.20d	.72	1.40g	.84
04	1.20d	.72	1.40g	.84
05	1.30d	.78	1.45g	.87
075	1.40f	.84		
1	1.50f	.90		

Sizes—Type	89
a—½ x 1½	f- 13 x 213
b—1/2 x 1 11	g- 13 x 218
e—————————————————————————————————————	h- +8 x 2 1 6
d x 2 3	k-1 = x + 2 = 3
e—13 x 111	

COMPACT ENERGY-STORAGE CAPACITORS TYPE PX

high-speed tash photography, capacitor discharge welding, flash signaling equipment, pulsing and other energy storage uses requiring extremely high curricular during short discharge per Compact, minimum weight, der lug terminals terne

high currents periods. Compact, minimum weight der lug terminals, terme containers.

22.5 WATT SECONDS

	V.D.C	nal nal C. Cap. Mfd.	Type No.	List Price	Net Price
	1500	20	PX10D1	\$14.00	\$ 9.80
1		50.0	WATT	SECONDS	
I	2000	28	PXI4D3	\$20.00	\$14.00
١		75.0	WATT	SECONDS	
ı	2500	24	PXI4D2		\$14.00
	3000	16	PX18DI	23.00	16.10
į		100.0) WATT	SECONDS	3
	2500	30	PX15D1 PX20D1		\$23.80
	4000	12.5	PAZUDI	22.00	15.40

PX10D1 dimensions 21/2"x31/4"x45/4" PX15D1B dimensions 4 9 "x3 % "x6 1/2". 2.28 ALL OTHERS 416"x3%"x4%" high.



aper Capacitors

IT'S MARKED 'AEROVOX''

OUALITY IT'S

CAPACITOR

AEROVOX "HYVOL"

OIL-IMPREGNATED OIL-FILLED

CAPACITORS

In Round Aluminum Cans Type 05



Cap.

Convenient round can, provided with ring mounting. High-voltage pillar terminals. Hermetically sealed in leak-proof containers. Very conservative ratings for continuous operation.

List

Type 605-600.v D.C.W. Net

Size-Ins.

Mfds.	Dia	ıHigh	Price	Price
1	2	x 2 3/4	\$3.80	\$2.28
	2	x 2 3/4	4.95	2.97
4	2	x 3 34	6.85	4.11
Ту	e 1	005-100	0v. D.C.	w.
1	2	x 3 4	\$4.20	\$2.52
2	2	x 4 1/4	5.70	3.42
4	2 1/2	2 x 4 3/4	7.25	4.35
Tyı	pe 1	505-150	0v. D.C.	w.
1	2	x 3 %	\$5,30	\$3.18
2	2	x 4 %	7.25	
4	2 1/	2 x 4 3/4	9.50	5.70
Ty	pe 2	005-200	0v. D.C	.w.
1	2	x 4 3/4	\$6.85	\$4.11
1 2	2	x 5 1/4	7.60	4.56
_	_			

Type 2505-2500v. D.C.W. 2 ½ x 4 ¾ \$9.15 2 ½ x 5 ¼ 15.00 Type 3005-3000v. D.C.W.

2 ½ x 4 ¾ \$13.75 3 x 5 ¼ 16.75

AEROVOX "HYVOL" VERTICAL-MOUNTING HIGH-VOLTAGE CAPACITORS

Type 14



Particularly ap-plicable for use in high-voltage filter circuits such as cacircuits such as cathode-ray tube power supplies, high-voltage by-pass circuits in transmitters and high-powered public address equipment. Type 14 units are made in the standard 1% "dismeter Grounded dismeter Grounded

\$8.25 10.05

diameter. Grounded can, with one-piece immersion - proof which provides maximum spacing between live terminal and can. Mounting ring furnished for up-right or inverted mounting.

Type 2014-2000v. D.C.W.

Cap.	Size-Ins.	List	Net
Mfds.	DiaHigh	Price	Price
.01	1 % x 2 1/4	\$6.00	\$3.60
.05	1 % x 2 1/4	6.65	3.99
.1	1 % x 2 %	7.00	4.20
.25	1 % x 8 1/4	7.60	4.56
Tv	na 3014-300	Ov. D.C.	w.

.01	1 3% x 2 1/4	\$7.50	\$4.50
.05	1 % x 2 1/4	8.00	4,80
.1	1 % x 2 %	8.50	5.10
.25	1 % x 3 %	9.50	5.70

AEROVOX "HYVOL"

OIL-IMPREGNATED OIL-FILLED

CAPACITORS

In Round Aluminum Cans
—Inverted Mounting

Type 10

This is an improved design, replacing the former single terminal type. single terminal type.

This new design is physically interchangeable with the old. Ideal for crowded assemblies; a logical choice in filter circuits of power supplies, high-gain high-fidelity amplifiers, and small transmitters. Hermetically-sealed. Has one-piece molded bakelite terminal assembly. Both terminal lugs are insulated from container.

	Jiitaiiiei.	ted Hom Co	moura
١.	00v. D.C.W	ype 610-60	Т
Net	List	Size · Ins.	
Price	Price	DiaHgt.	Mfds.
\$2.49	\$4.15	1 1/2 x 3 1/2	2
3.42	5.70	1 1/2 x 5 1/4	4

Type 1010-1000v. D.C.W. 1 ½ x 2 % 1½ x 4 ½ \$3.80 \$2.28 4.95 2.97

Type 1510-1500v. D.C.W. \$2.73 \$4.55 3/2 x 2 7/4 2.97 1½ x 4½ 4.95

AEROVOX "HYVOL" VERTICAL-MOUNTING HIGH-VOLTAGE CAPACITORS OIL-IMPREGNATED OIL-FILLED



This is an immersion - proof capacitor de-signed to meet high - voltage operating requirements. Suitable for such high - voltage circuit applica tions as in tele-

Recommended where long leakage path between terminals is required. path between terminals is required. Barrier in bakelite top increases insulation and creepage path between terminals. For certain applications, the ceramic insulators may be removed if desired. Supplied with adjustable mounting ring for vertical mounting.

Ty	pe 2012-20	00v. D.C.	W. Net Price \$4.41 5.46
Cap.	Size-Ins.	List	Net
Mfds.	DiaHgt.	Price	Price
1.0	21/4 x 33/4	\$7.35	\$4.41
2.0	2 1/4 x 5 1/4	9.10	5.46

T,	ype 3012-30	00v. D .C.	W.
.05		\$9.50	\$5.70
.1	2 1/4 x 2 1/4	10.00	
.25	24 x 34	11.00	6.60
.5	24 x 34	12.00	7.20
1.0	$2\frac{1}{4} \times 5\frac{1}{4}$	15.25	9.15

Ty	/pe 40	12-4	000v. D	.C.W.
.05	2 1/4 N	2%	\$9.0	0 \$5.40
.1	21/4 3	3 %	9.5	0 5.70
.25	2 1/4 x	5 1/4	10.5	0 6.30

	2			
T	ype 60	12-60	00v. D.C	.w.
.03	2 1/4 x	2 %	\$12.00	\$7.20
.05	2 1/4 x	3 3/4	13.50	8.10
.1	21/4 x	4 %	16.50	9.90

T.	ype 7512-7	500v. D.C	.w.
.01	21/4 x 31/4	\$12.00	\$7.20
.02	24 x 34	13.00	7.80
.03	2 14 x 3 34	14.00	8.40
.05	214 x 414	15.50	9.30
.1	2 1/4 x 4 3/4	19.00	11.40

AEROVOX "HYVOL"

OIL-IMPREGNATED OIL-FILLED CAPACITORS

In Rectangular Metal Cans

Type 09







Type 09 (Basic)

Type 09MB (Mounting Bracket)

Type O9MS (Strap Mounting)

Hermetically-sealed in sturdy can, leakproof and seepageproof. High tension pillar terminals fitted with locknuts and soldering lugs. Exceptionally compact dimensions for given capacity, working voltage—and safety factor due to use of "Hyvol." Intended for heavy-duty continuous service in transmitters,

Type 609-600v. D.C.W.

Cap. Mids.	Size·Ins. L. W. D.	List Price	Net Price
.5	21/4 x 1 1 2 x 1 1 6	\$4.15	\$2.49
1.0	2 1/8 x 1 1/8 x 1 1/6	5.30	3.18
2.0	2 % x1 13 x1 16	6.45	3.87
3.0	$3\% \times 1\frac{13}{16} \times 1\frac{1}{16}$	7.60	4.56
4.0	$3\frac{1}{4}$ x $2\frac{1}{2}$ x $1\frac{3}{10}$	8.35	5.01
5.0	$4 \frac{1}{8} \times 2 \frac{1}{2} \times 1 \frac{3}{16}$	9.50	5.70
6.0	$4 \% \times 2 \% \times 1 \frac{3}{16}$	10.25	6.15
8.0	3 % x 3 % x 1 %	12.15	7.29
10.0	4 % x 3 % x 1 %	13.65	8.19
12.0	4 % x 3 % x 1 ½	15.20	9.12
15.0	4 % x 3 % x 1 %	16.80	10.08

Type 1009-1000v. D.C.W.

.1	2 $x1\frac{13}{16}x1\frac{1}{16}$	\$3.80	\$2.28
.25	2 1/2 x 1 1/3 x 1 1/6	4.15	2.49
. 5	$2\frac{1}{3} \times 1\frac{13}{16} \times 1\frac{1}{16}$	4.55	2.73
1.0	21/2 x 1 1/2 x 1 1/2	5.70	3.42
2.0	3 %x1 13x11	7.60	4.56
3.0	3 1/2 x 2 1/2 x 1 1/3	8.60	5.16
4.0	4 % x 2 1/2 x 1 3	9.50	5.70
5.0	374x334x14	11.40	6.84
6.0	4 34 x 3 34 x 1 14	12.55	7.53
8.0	4 % x 3 % x 1 1/4	13.65	8.19
10.0	4 % x 3 % x 1 %	15.20	9,12
12.0	3 % x3 % x2 %	16.70	10.02
15.0	4 % x 3 % x 2 1/2	18.25	10.95

Type 1509-1500v. D.C.W.

	P		
. 5	2 % x 1 13 x 1 15	\$6.05	\$3.63
1.0	4 x1\frac{1}{16}x1\frac{1}{16}	6.85	4.11
2.0	4 1/8 x 2 1/2 x 1 3	9.50	5.70
3.0	4 % x 2 ½ x 1 3	11.40	6.84
4.0	4 % x 3 % x 1 %	12.90	7.74
5.0	4%x3%x1%	13.65	8.19
6.0	4 % x3 % x1 %	15.55	9.33
8.0	4 34 x 3 34 x 2 1/2	19.00	11.40
0.0	4 % x 3 % x 3 3	22.80	13.68
2.0	4 % x3 % x3 %	25.05	15.03
5.0	4 34 x 3 34 x 4 18	27.35	16.41
	• • •		

Type 2009-2000v. D.C.W.

.1	2 x1+3x1+3	\$6.05	\$3.63
.25	2 1/8 x 1 1/3 x 1 1/3	6.45	3.87
.5	2%x113x11	6.85	4.11
1.0	3 %x2 1/2 x1 3	8.35	5.01
2.0	4 x3%x14	9.90	5.94
3.0	4 % x 3 % x 1 1/4	12.15	7.29
4.0	374x34x214	13.65	8.19
5.0	4 % x3 % x2 %	15.20	9.12
6.0	4 1/8 x 3 3/4 x 3 3/10	17.85	10.71
8.0	4 1/8 x 3 1/4 x 3 1/8	22.80	13.68
10.0	4 34 x 3 34 x 4 18	28,10	16.86
12.0	5 % x 3 % x 4 %	30.40	18.24
15.0	61/2 x 3 3/4 x 4 18	86.70	22.02

amplifiers, etc. Type MB bracket is normally supplied as standard equipment, unless otherwise specified, on all units having base sizes other than 3 ¾ " x 3 ½" and 3 ¾ " x 4 ½". Type MS is normally supplied as standard with these latter base sizes.

Type 2509-2500v. D.C.W.

Price	Price	D.	W.	L.	Mfds.
Net	List	8.	ze-In	Si	Cap.
\$6.39	\$10.65	x 1 3	x2½	3 1/2	.5
7.29	12.15	x1¾	x334	31/4	1.0
11.85	19.75	x1¾	x3%	4 %	2.0
16.41	27.35	$x3\frac{3}{16}$	x334	4 %	4.0
41.01	68.35	x4 18	x3%	6%	10.0

Type 3009-3000v, D.C.W.

.1	2x2½x113	\$12.90	\$7.74
.25	$2\frac{1}{2}$ x $2\frac{1}{2}$ x $1\frac{3}{16}$	13.65	8.19
.5	3 % x 3 ½ x 1 3	15.20	9.12
1.0	3 % x 3 % x 1 %	18.25	10.95
2.0	4 1/8 x 3 1/4 x 3 1/4	22.80	13.68
4.0	$4 \frac{3}{4} \times 3 \frac{3}{4} \times 4 \frac{9}{16}$	33.40	20.04

Type 4009-4000y, D.C.W.

.1	2 14 x 3 14 x 2 14	22.80	13.68
.25	2 34 x 3 34 x 2 1/4	24.30	14.58
.5	3 % x 3 % x 2 1/4	27.35	16.41
1.0	5 1/2 x 3 3/4 x 2 1/4	33.40	20.04
2.0	5 1/8 x 3 3/4 x 4 1/6	42.55	25.53
4.0	8 x334x4 9	60.75	36.45

Type 5009-5000v. D.C.W.

.1	2 34 x 3 34 x 2 14	24.35	14,61
.25	3 % x 3 % x 2 %	27.55	16.53
.5	4 14 x 3 34 x 2 14	30.40	18.24
1.0	4 % x 3 % x 4 19	38.00	22.80
2.0	6 x3 ³ / ₄ x4 ⁹ / ₁₆	48.60	29.16

Type 6009-6000v. D.C.W.

.1	3 %x3 %x2 %	30.40	18.24
.25	4 %x3 %x2 ¼	38.00	22.80
.5	4 % x3 % x4 16	43.05	2 5.83
1.0	8 x3 3 x 4 1 6	75.95	45.5 7

Type 7509-7500v. D.C.W.

.1	3 % x 3 % x 2 1/4	43.05	25.83
.25	5 1/2 x 3 1/4 x 2 1/2	45.55	27.33
.5	5 1/8 x 3 3/4 x 4 1/6	49.35	29.61



ber Capacitors

IT'S

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''AEROVOX''

IT'S

CAPACITOR

HIGH-VOLTAGE TRANSMITTER TYPE D.C. CAPACITORS

Type 20

6,000v. D.C. Work. to 50,000v. D.C. Work.



These capacitors meet the exacting requirements of radio transmitter service and other applications requiring high-voltage, heavy-duty, transmitter-type oil capacitors. Available in ratings from 6000 volts to 50,000 volts D.C. working. These are single-section or parallel-section capacitors. Type 20 units are critically checked to close standards of physical and electrical perfection. Capacitor sections consist of multi-layered capacitor tissues and high-purity aluminum foil, uniformly and accurately wound under critically-controlled tension, then vacuum-impregnated with Aerovox Hyvol to insure stability of full-rated capacitance, even at zero temperatures. Welded steel containers finished in non-corrosive, dark grey lacquer. Heavy-duty porcelain insulator assembly is cork-gasketed and pressure sealed to prevent leakage of oil or entrance of moisture at the terminals. Single-section units rated at 30 kV or less are normally supplied with capacitor section insulated from ground. Additional information on Type 20 units rated at 25,000 volts output is available on application. All Type 20 units are built to special order—not carried in stock.

All Type 20 units are built to special order—not carried in stock. Submit full application information when ordering.

COMPACT

HERMETICALLY-SEALED

"HYVOL" CAPACITORS Type 16T

(Terminals on Top)



Compact, oilfilled, hermetic-ally-sealed units for use where least space and m i n i m u m weight are es-sential. Corrosion-proof metal

sion-proof metal container. Special immersion-proof terminals designed for equipment subjected to severe atmospheric and climatic conditions. Suitable for by-pass and filter applications in receivers and low-payer transmitters. and low-power transmitters.

Type 416T 400v. D.C. Working

Cap. Mfds.	H x W x D	List Price	Net Price	
.01	1 1/8 x 1 5 x 1 1 6	\$2.60	\$1.56	
.05	$1\frac{7}{16} \times 1\frac{5}{16} \times \frac{1}{6}$	2.65	1.59	1
.1	$1\frac{7}{16}x1\frac{5}{16}x\frac{11}{16}$	2.85	1.71	
.25	$1\frac{1}{10} \times 1 \frac{5}{10} \times \frac{11}{10}$	2.90	1.74	
.5	1 1 5 x 1 5 x 1 1 8	2.95	1.77	
1.0	$2\frac{1}{16}x1\frac{5}{16}x\frac{11}{16}$	3.30	1.98	
	Tyne 6	16T		
		WOIKING		
		\$2.65	\$1.59	
		2.80	1.68	
. 1	$1\frac{7}{16} \times 1\frac{5}{16} \times \frac{11}{16}$	2.90	1.74	
.25	$1\frac{11}{16}x1\frac{5}{16}x\frac{11}{6}$	2.95	1.77	
.5	$2\frac{1}{16}x1\frac{5}{16}x\frac{11}{16}$	3.05	1.83	
1.0	$2\frac{9}{16}$ x $1\frac{5}{16}$ x $\frac{11}{16}$	3.40	2.04	
	T 10			
	•			
	1000v. D.C.	Working	1	
.01	1 1/4 x 1 5 x 1 1	\$2.80	\$1.68	
.05	$1\frac{7}{16}x1\frac{5}{16}x\frac{11}{16}$	2.85	1.71]
.1	1 1 x 1 5 x 1 1	2.95	1.77	ľ
.25	1 1 1 x 1 5 x 1 1	3.05	1.86	
.5	$2\frac{1}{16}x1\frac{5}{16}x\frac{11}{16}$	3.30	1.98	
		_	— ,	
	Mfds01 .05 .1 .25 .5 1.0 .01 .05 .1 .25 .5 .1 .05 .1 .25 .5 .1 .25 .5 .1 .01 .05 .1 .25 .1 .25	Mfds. H x W x D .01 1½x1ភៃx1ភៃ .05 1ភិx1ភិx1ភិ .1 1ភិx1ភិx1ភិ .25 1½x1ភិx1ភិx1ភិ .5 1½x1ភិx1ភិ .600v. D.C01 1½x1ភិx1ភិx1ភិ .25 1½x1ភិx1ភិx .1 1ភិx1ភិx1ភិ .25 1½x1ភិx1ភិx .1 1ភិx1ភិx1ភិ .25 1½x1ភិx1ភិx .5 2ភិx1ភិx1ភិ .5 2ភិx1ភិx1ភិ .5 1½x1ភិx1ភិ .5 1ភិx1ភិx1ភិ .5 1ភិx1ភិx1ភិ .5 1ភិx1ភិx1ភិx .5 1ភិx1ភិx1ភិx1ភិx .5 1ភិx1ភិx1ភិx1ភិx .5 1ភិx1ភិx1ភិx1ភិx1ភិx .5 1ភិx1ភិx1ភិx1ភិx1ភិx1ភិx1ភិx1ភិx1ភិx1ភិx	Mfds. H x W x D Price .01 1½x1½x½ \$2.60 .05 1½x1½x½ \$2.65 .1 1½x1½x½ 2.85 .2.5 1½x1½x½ 2.90 .5 1½x1½x½ 2.95 .1.0 2½x1½x½ 2.95 .00 2½x1½x½ 2.95 .1.0 1½x1½x½ 2.95 .1.0 2½x1½x½ 2.95 .1.0 2½x1½x½ 2.95 .1.0 1½x1½x½ 2.65 .1 ½x1½x½ 2.65 .1 ½x1½x½ 2.65 .1 ½x1½x½ 2.95 .5 2½x1½x½ 2.95 .5 2½x1½x½ 2.95 .5 2½x1½x½ 2.95 .1.0 2½x1½x½ 3.05 .1 1½x1½x½ 3.05 .1 1½x1½x½ 3.40 Type 1016T 1000v. D.C. Working .01 1½x1½x½ 3.40 Type 1016T 1000v. D.C. Working .01 1½x1½x½ 3.40 .05 1½x1½x½ 3.40 .05 1½x1½x½ 3.40 .06 1½x1½x½ 3.40 .07 1½x1½x½ 3.40 .08 1½x1½x½ 3.40	Mfds. H x W x D Price .01 1½x1ሟx½ \$2.60 \$1.56 .05 1፲፰x1ሟx½ 2.65 1.59 .1 1፫x1ሟx½ 2.85 1.71 .25 1½x1ሟx½ 2.95 1.74 .5 1½x1ሟx½ 2.95 1.77 .0 2ሟx1ሟx½ 2.95 1.77 .0 1½x1ሟx½ 2.95 1.79 .0 1½x1ሟx½ 2.95 1.79 .0 1½x1ሟx½ 2.95 1.74 .25 1⅓x½¼ 2.95 1.74 .25 1⅓x¼¼ 2.95 1.77 .5 2ሟx1ሟx½ 2.95 1.77 .5 2ሟx1ሗx½ 2.95 1.77 .5 2ሟx1ሗx½ 2.95 1.77 .5 1⅓x¼¼ 2.95 1.83 .0 1 1¼x1ሗx½ 3.05 1.86 .0 1 1¼x1ሗx½ 3.05 1.86 .0 1 1¼x1ሗx½ 3.05 1.86

COMPACT

QUALITY

HERMETICALLY-SEALED OIL-IMPREGNATED, OIL-FILLED OIL-IMPREGNATED, OIL-FILLED

"HYVOL" CAPACITORS Type 18B

(Terminals on Bottom)



Compact, oil-filled, hermetically-sealed units. Type 18 is smaller in height and depth than Type 16. in height and depth than Type 16. However, greater width makes Type 18 adaptable for applications where small-sized dual- and triple-section capacitors with three terminals are required. Otherwise, similar to Type 16 with respect to construction and application.

Type 418B 400v. D.C. Working Single Section Units

Cap. Mfds.	HxWxD	List Price	Net Price
.05	1 x1% x10 1 x1% x10	\$2.85 2.95	\$1.71
. 25	1 1/2 x 1 3/4 x 1/8	3.05	1.77
.5 1.0	111 x 1 % x 18 2 x 1 % x 18	3.15 3.50	1.89
1.0	- x174, x18	3,30	2.10
	Dual-Section U	nits	
.0505	1 v13/v9	69 CE	62 10

.00	1 3174 A 17	\$0.00	32.19
.11	1 1/4 x 1 3/4 x 10	3.75	2.25
. 25 25	1 1 x 1 3/4 x 1 8	3.90	2.34
.55	2 x13/4 x $\frac{9}{16}$	4.25	2.55
Tr	iple-Section L	Inits	

$\begin{array}{cccccc} .05\text{-}.05\text{-}.05 & 1 & \text{x1}\,\%\,\text{x}_{16}^{9} & \$4.50 \\ .1\text{-}.1\text{-}.1 & 1\,\%\,\text{x1}\,\%\,\text{x}_{16}^{9} & 4.80 \\ .25\text{-}.25\text{-}.25 & 2 & \text{x1}\,\%\,\text{x}_{16}^{9} & 5.20 \end{array}$ \$2,70

Type 618B 600v. D.C. Working Single Section Units

.05	1 x1¾ x ⁹	\$2.90	\$1.74
.1	1 x13/4x18	3.05	1.83
.25	1½x1¾x2	3.15	1.89
.5	$1 + \frac{1}{12} \times 1 \% \times \frac{9}{10}$	3.35	2.01
1.0	2½x1¾x x 8	3.65	2.19
	Dual-Section U	nits	

05-05

.11	1 1/2 x 1 3/4 x 1/2	3.90	2.34
.2525	1 1 1 x 1 % x 10	4.15	2.49
.55	2 % x1 % x 3	4.50	2.70
	10		

Triple-Section Units

1	.050505	1 3/8 x 1 3/4 x 1/8	\$4.55	\$2.73
ĺ	.111	$1\frac{9}{8}$ x $1\frac{9}{4}$ x $\frac{9}{16}$	4.95	2.97
į	.252525	1 1 2 x 1 3/4 x 1 8	5.30	3.18

Type 1018B 1000v. D.C. Working Single Section Units

		,		O CO	
.05		1	x1%x 2	\$3.05	\$1.83
.1		1	x13/4 x 18	3.15	1.89
.25		1%	x13/4 x 1/6	3.30	1.98
.5		1 1 3	x1%x10	3.50	2.10
	_				

Dual-Section Units

.0505	1 1/2 x 1 3/4 x 1/8	\$4.15	\$2.49
.11	1 1/2 x 1 3/4 x 1 8	4.45	2.67
25 - 25	113v134 v 9	4 55	2 73

Triple-Section Units

.050505	13%x13%x-9	\$4.95	\$2.97
.111	2%x1%x1%	5.30	3.18

Type 6020-6000v. D.C.W.

Cap.	Case Size-Ins.	List	Net
Mfds.	H x W x D	Price	Price
2.0 4.0 5.0 6.0	11x 8x4 11x12x4 11x12x4 13x12x4	\$136.00 167.00 189.00	\$ 82.00 100.00 113.00
10.0	13x12x4	212.00	127.00
	13x12x6	265.00	159.00
_			

Type 7520-7500v. D.C.W.

0.5	11x 8x4	\$ 75.00	\$ 45.00
1.0	11x 8x4	98.00	59.00
2.0	11x 8x4	151.00	91.00
4.0	13x12x4	227.00	136.00
6.0	13x12x6	273.00	164.00

Type 10020—10,000v. D.C.W.

1.0	11x 8x4	\$197.00	\$118.00
2.0	11x12x4	250.00	150.00
4.0	13x12x6	303.00	182.00
5.0	13x12x6	334.00	200.00

Type 12520—12,500v. D.C.W.

0.5	11x 8x4	\$167.00	\$100.00
1.0	11x12x4	212.00	127.00
2.0	13x12x6	265.00	159.00
5.0	$15x12x9\frac{1}{2}$	501.00	300.00

Type 15020-15,000v. D.C.W.

Cap. Mfds.	Case Size-Ins. H x W x D	List Price	Net Price
0.25	11x 8x4	\$159,00	\$ 95.00
0.5	11x12x4	189.00	113.00
1.0	13x12x4	265.00	159.00
2.0	15x12x91/2	349.00	209.00
3.0	15x12x91/2	478.00	287.00

1 Abe	200202	:0,000v. D	.c.w.
0.25	11x 8x4	\$189.00	\$113.00
0.5	11x12x4	243.00	145.00
1.0	13x12x6	326.00	195.00
5	15x12x91/2	440.00	264.00
2.0	15x12x91/2	524.00	314.00
1.0	15x14x16	919.00	551.00

Type	250202	5,000v. 🗅).C-W,
0.2	11x12x4	\$197.00	\$118.00
0.25	11x12x4	265.00	159.00
0.5	13x12x6	288.00	173.00
1.0	15v19v014	432.00	250.00

Type 37520—37,500v. D.C.W. Information supplied on application.)

Type 50020--50,000v. D.C.W. (Information supplied on application.)

j	Type 12520 VD
ı	25,000 Volts Output (12,500— 12,500 Volts)—Dual Units (Information supplied on application.)
ł	12,500 Volts)-Dual Units
ı	(Information supplied on application.)



CUSTOM-BUILT PAPER CAPACITORS TO MEET YOUR SPECIAL NEEDS -

If your paper capacitor needs are most unusual, AEROVOX will work with you in designing and producing special types. With many basic types to draw upon-a wide choice of containers, terminals, mountings, sizes, etc .-- we can quickly and economically produce out-of-the-ordinary capacitors to meet those extraordinary requirements. Address your inquiry to Aerovox Engineering Department, New Bedford, Mass.















Vitreous-Enameled and Carbon RESISTORS

IF IT'S MARKED

"AEROVOX"

IT'S A QUALITY

CAPACITOR ...

"SLIDEOHM" Wire-Wound Vitreous-Enameled ADJUSTABLE RESISTORS



Adjustable resistors combining adjustment to any resistance value within unit's range, with positive, permanent, non-fluctuating qualities of wire-wound resistor. Each Slideohm Resistor is provided with horizontal mounting brackets and one adjustable contact slider.

Type 952—25 Watts Size % x 2 inches

DIEC /8 11 =	11.01.00	
Ranges	List	Net
1-5000 each		\$0.74
6000-10,000	. 1.43	.85
Extra Slider Bands-1	13c ea.,	Net 7

Type 954—50 Watts
Size ¾ x 4 ½ inches
Ranges List Net
5-5000 — each \$1.95 \$1.17
6000-25,000 — 2.15 1.29
30,000-50,000 — 2.47 1.48
Extra Slider Bands-13c ea., Net 7c
Type 956—75 Watts
Size ¾ x 6¼ inches

 Size ¾ x 6½ inches

 5-5000
 each \$2.54
 \$1.52

 6000-25,000
 2.86
 1.71

 30,000-50,000
 3.25
 1.95

 60,000-70,000
 3.58
 2.14

 Extra Slider Bands-20c ea., Net 12c

 Type 957—100 Watts

Size 1 1/8 x 6 1/2 inches
5-5000 each \$2.86 \$1.71
6000-25,000 3.25 1.95
30,000-50,000 3.58 2.14
60,000-75,000 3.90 2.34
Extra Slider Bands-20c ea., Net 12c

Type 958—200 Watts
Size 1 ½ x 10 ½ inches

5-10,000 each \$4.29 \$2.57
4 15,000-100,000 5.01 3.00
125,000-150,000 5.33 3.19

6 Extra Slider Bands-20c ea., Net 12c

6000-10,000	1.43	.85 I	20,000-100	,000 b. Rands⊸200:e	o Net 12c
Extra Slider Ba					
Type	952	954	956	957	958
Resis.	25 Watts	50 Watts	75 Watts		200 Watts Cur. M.A.
Ohms	Cur. M.A.	Cur. M.A.	Cur. M.A.	Cur. M.A.	Gur. W.A.
1	5000				
3	2880		0.080	4.470	6290
5	2230	3160	3870	4470	6320
10	1580	2240	2740	3160	4470
15	1290		2240	2580	
20	1115			***	0.007
25	1000	1410	1730	2000	2825
50	710	1000	1220	1410	2000
75	580	815	1000	1150 1000	1400
100	500	705	865	1000	
150	410	575	010		
200	355	500	610	680	900
250	315	445	550	080	. 800
300	290	405	500 430		
400	250	350	430		
500	225	315	385	445	630
750	180	260	315	3 6 5	
800		250	305		
850	170				
1000	160	225	275	315	450
1250	140	200	245		
1500	130	180	225	260	365
2000	110	160	195	225	315
2250	105	150			
2500	100	140	173	200	280
3000	90	130	158	180	260
3500	85	120	146	170	240
4000	80	110	137	160	225
4500	74	105	129	150	210
5000	70	100	122	140	200
6000	65	91	111	130	
7000	57	85	103		
7500	53		100	115	165
8000	50	79	97	110	
8500	47				
9000	4 4	75	91		
10,000	40	71	87	100	140
12,000		64			
15,000		58	71	80	115
20,000		48	61	70	100
25,000		40	55	69	90
30,000		33	50	50	82
35,000			43	43	71
40,000		25	37	37	62
50,000		20	30	30	50
60,000			25	25	42
70,000			21	21	
75,000				20	33
100.000					25
125.000					20
150.000					16

"PYROHM JUNIOR"

Wire-Wound Vitreous-Enameled FIXED RESISTORS

Types 931 and 933



Compact, genuine wire-wound units. Covered with vitreous-enamel. Highest quality materials used throughout. Correctly designed. Note these features:

- 1. Crack-proof refractory tubing for the support. Adequate heat dissipation.
- 2. Quality resistance wire precisely space wound under tension.
- Copper terminal band clamped to tubing. Wire ends wrapped about raised ear and brazed to same.
- 4. Heavy vitreous-enamel coating for permanent seal against moisture, oxidation and mechanical damage.
- 5. Pig-tail of stiff wire 2 in long soldered to terminal band for positive, non-breakable connection.

	Type 931—10 Watts					
i _		18. 16 X 1				
Range		List				
		\$0.5				
12,000	0-50,000	6	5 .39			
30,0 at 5 w		0,000 olu	ms, rated			
		Istance Ra	nges			
1	200	1750	12,000			
-2	250	2000	12,500			
3	300	2500	13,500			
4	350	2750	14,300			
	400	9000	15 000			

at 5	watts.		
	Stock Re	sistance Ra	nges
1	200	1750	12,000
-2	250	2000	12,500
3	300	2500	13,500
4	350	2750	14,300
5	400	3000	15,000
7.5	450	3500	16,000
10	500	4000	17,500
12	600	4500	18,000
15	650	5000	20,000
20	700	5500	22,500
25	750	6000	25,000
30	800	7000	30,000
35	850	7500	35,000
40	900	8000	40,000
50	1000	8500	45,000
7.5	1100	9000	50,000
100	1200	10,000	
125	1250		
150			
175	1500		

Type 933- Size—II		
Ranges	List	Net
1-15,000		\$0.59
20.000-50,000	1.11	.66 .85
55,000-100,000		
25,000-100,000	onms rated	at 1

ſ				
ı		Stock Re	esistance Ra	nges
1	1	650	3000	35,000
Į	3	700	3500	40,000
	5	750	4000	45,000
i	10	800	4500	50,000
	15	850	5000	55,000
	25	1000	6000	60,000
	50	1200	7000	65,000
	75	1250	7500	70,000
	100	1500	8000	75,000
	150	1750	10,000	80,000
	175	1850	12,500	85,000
	200	2000	13,000	90,000
	250	2250	15,000	95,000
	300	2400	20,000	100,000
	350	2500	25,000	
	400	2750	30,000	
	500			
	1			

INSULATED MOLDED CARBON RESISTORS

Types 1097 and 1098



Small, noiseless, vibration-proof. Crack-proof molded casing around molded carbon resistance element. Tinned copper pig-tail leads 2 in. long. Resists humidity effects. Ideal for AVC circuits, high-gain amplifiers. RMA color - coded; stamped with resistance value. Precision tested. Standard tolerance 10%. These types may come thru for some time in slightly larger sizes until complete changeover is achieved.

Types	Rating Watt	Size Ins.	List ea.	Net ea.
1098 1097		1 1/4 x 5/8	\$.17	\$.10
1097	1/2	5 x 3/3	.13	.08

Stock	Desist	ance nange	2—0111112
10	750	11000	150000
15	800	12000	175000
20	900	12500	200000
2.5	1000	13000	250000
30	1250	14000	300000
40	1500	15000	400000
50	1750	17500	500000
60	2000	20000	600000
75	2250	22500	750000
100	2500	25000	1 Meg.
120	3000	30000	1 1/2 Meg.
150	3500	35000	2 Meg.
200	4000	40000	2 1/2 Meg.
250	5000	50000	3 Meg.
300	6000	60000	4 Meg.
350	7000	65000	5 Meg.
400	7500	70000	6 Meg.
450	8000	75000	7 Meg.
500	9000	100000	10 Meg.
	10000	125000	20 Meg.

Stock Resistance Ranges-Ohms



TEST INSTRUMENTS



Model No. 76 \$44.75 Net, Each

AEROVOX CAPACITANCE AND RESISTANCE BRIDGE

AEROVOX MODEL 76 Resistance Capacitance Bridge is the new postwar general-utility instrument combining simplicity of operation, remarkable degree of accuracy, and modest price. Extreme ruggedness makes it equally suitable out on the job, in the shop, or in the laboratory.

Sloping panel 10" x 6". Aluminum, etched and anodized. Steel cabinet, black crackle finish. All readings taken from main 4" dial. Same calibrated scale eliminates trouble and chances for errors in reading. Linear scale, also an exclusive feature, means no crowding at high end to make readings difficult and inaccurate. Both the resistance and the capacitance readings are covered by six overlapping ranges, as aginst two or three in usual service instruments, for maximum sensitivity and accuracy. Positive "magic eye" indicator.

Here is what Model 76 Bridge does: (1) Measures capacitance from 100 mmf. to 200 mfd. in six ranges. (2) Measures resistance from 10 ohms to 20 megohms in six ranges. (3) Measures power factor from 0 to 50%. (4) Provides D.S. polarizing potential for leakage measurements, from 0 to 600 V. D.C., continuously variable and calibrated in volts. (5) Checks leakage or insulation resistance.

Instrument is provided with shockproof, color-coded test leads fitted with banana plugs for panel jacks, and with clips. Instructions. Measures 10" x 7¾" x 8¼". Weight 8 lbs. 3 oz.

AEROVOX L-C CHECKER

★ This exclusive Aerovox development has no counterpart, much less an equal. Basically, it determines the effectiveness of any capacitance or inductance while actually connected in its circuit. Testing efficiency is greatly increased. Components may be tested singly or in combinations whereby to determine resonant frequency and effectiveness of given circuits. Circuit or systems may be adjusted by this checking means for proper operating efficiency. Certainly a "must" instrument for the radio worker.

HERE'S A PARTIAL LISTING OF WHAT THE AEROVOX L-C CHECKER DOES:

It checks capacitance of capacitors at radio frequencies without removing them from circuit. . It checks alignment of r.f. circuits; also tracking of super-het. oscillator. • It checks alignment of broad and narrow band i.f. amplifiers. • It checks the tuning of wave traps and of image-rejection circuits; frequency ranges of receivers; frequency ranges of signal generators; calibration of wave meter. • Identifies harmonics of frequency standard in precision frequency calibration of radio equipment. • It checks natural resonant points of r.f. chokes making sure they are beyond operating range. • It traces resonant absorption trouble in "all-wave" receiver circuits-locating dead spots, etc. • It locates resonant points in shorted windings (unused coils) in multi-range oscillators, etc. • Locates resonant frequency of r.f. coupling chokes, making certain of placement to secure enough gain balance over tuning range of r.f. stage . It checks natural period of antennae and transmission lines in

order to have resonant peaks at certain frequencies. • It checks quartz crystals for frequency, false frequency, operation at harmonics, and for activity. • Checks FM i.f. transformers. . Checks alignment of FM i.f. channels. • Checks leakage of paper capacitors. And it checks many other functions when used with auxiliary equipment. This checker operates from AC or from DC 120 volts source. It has a frequency range from 100 KC to 44 MC as follows:



Model No. 96 \$44.75 Net, Each

Range: A — 75 — 225 KC | D — 1.5 — 5 MC B — 200 — 600 KC | E — 4.5 — 14.5 MC C — 550 — 1650 KC | F — 13 — 44 MC

Capacitance Range: .00025 mfds. - 1 mfd.

Inductance Range: 0 — 500 MH

Tube Complement: 6J5G, 25Z5, 6E5, VR105Accuracy: Capacitance and Inductance $\pm~10\%$

Frequency Ranges A, B, C: ± 1%

Other Ranges: ± 2.5%

Dimensions: $10\frac{1}{2} \times 7\frac{1}{2} \times 5\frac{1}{2}$

This new model L-C Checker has provisions for determining the insulation resistance of capacitors in addition to the measurements described in bulletin 995A.

Weight: (shipping) 6 lbs.

Special-duty Capacitors 15 17'S MARKED "AEROVOX" IT'S A QUALITY CAPACITOR

P.S.

• This is a postscript. This page contains several new Aerovox products recently introduced and not as yet cataloged. These special-duty capacitors are of particular interest to advanced radio workers, builders of special equipment, experimenters and engineers.

Other new products are being announced from

time to time. Aerovox engineering is keeping abreast of the rapid advances of the racio-electronic art. Therefore, if you do not see what you need in these pages, tell us about your unusual needs. Aerovox either has a type already developed and in production, or will consider an entirely new type if warranted by the anticipated demand.

LOW-INDUCTANCE MICA CAPACITOR

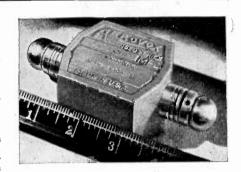
AEROVOX SERIES 1690 is a molded-in-bakelite mica capacitor designed for exceptionally low loss operation at ultra high frequencies. External evidence of its efficiency is offered by the rounded hardware—round nuts, round washers and spherical lock nuts eliminating sharp edges and corners that cause corona losses. The use of fine threads for the terminal studs insures maximum contact and minimum r.f. resistance. Silver plating of all conducting members minimizes skin resistance. The body is of XM or yellow low-loss bakelite. Internally, the mica stack is designed for a straight-line path for high frequencies.

This type is several times larger than the conventional molded-in-bakelite transmitting

micas. Body dimensions are 2%" wide x 2-3/16" deep x 1%" high, and 4%" overall between rounded terminal tips.

Units are available in ratings up to 20,000 volts D.C. Test or 10,000 volts operating, and in capacitance values up to .001 mfd. at the highest voltage rating.

This type has been developed specifically for lower r.f. resistance and impedance, thereby providing increased KVA ratings for given size. Such units can be advantageously applied as blocking capacitors in transmission lines, as tank capacitors for high-frequency oscillators, as by-pass capacitors for ultra-high-frequency energy, and as coupling or by-pass capacitors in induction-heating circuits.



WATER-COOLED MICA CAPACITOR

AEROVOX SERIES 1780 water-cooled mica capacitor is available for extra-heavy duty service such as high-power transmitters and induction furnaces. The water-cooling feature boosts the KVA rating by a factor of five or more, or conversely, greatly reduces the bulk for given rating.

The higher KVA ratings are obtained in two ways: First, by exceptional design such as critical arrangement and location of mica sections; critical selection of materials; specially-plated parts; large cross-section of conductors; attention to details. Second, by the use of a water-cooling system so designed as to provide maximum heat transfer from capacitor to cooling coils.

The mica stacks are in an oil bath. Cooling coils in the oil bath provide for the efficient transfer of heat. What this cooling system means may be judged from the fact that a unit handling 200 KVA for

air-cooled operations steps up to 1000 KVA with water-cooling.

The series-parallel mica stack is designed for uniform current distribution throughout. There is a large factor of safety. Silver-plated hardware minimizes skin resistance. Terminals are furnished with large radii of curvature to minimize and even eliminate corona. The steatite insulator is shaped to hold gradients below corona limits.

Heavy non-ferrous welded metal case, hermetically-sealed and grounded. Side-mounted nipples for connecting water-cooling hose. Sturdy mounting flanges. Provisions for making connectious with high-current-capacity conductors. Four-stud terminal for low-loss connections.

Available in ratings up to 25,000 volts A.C. Test, and in capacitances up to .01 mfd.



ULTRA-HIGH-FREQUENCY CAPACITORS

AEROVOX SERIES 1860 and 1865 are engineered and especially recommended for use in ultra-high-frequency radio equipment such as television and FM transmitter, as well as other miscellaneous applications in the u.h.f. field. In such applications they are readily adaptable for use as fixed-tuning capacitors, bypass, blocking, coupling, neutralizing and antenna-series capacitors.

Losses are extremely low, due to the highly refined sulphur dielectric. Corona losses are avoided by the unique construction design, the grounded case and the terminal on each type.

Series 1860 (not illustrated) is the smaller unit in an aluminum can, intended more for the radio amateur and experimenter, and for low-cost assemblies. It has a suitably plated brass terminal mounted on a mica insulating plate. Available in four types: .0001 mfd., 10,000 v.; .000025 mfd., 10,000 v.; .00005, 5000 v.; .00005, 10,000 v. Voltage is Peak Working Volts.

Series 1865 (illustrated) is the larger unit, in a cast aluminum case with steatite insulator supporting the higher-voltage terminal. Available in capacitances from .00002 to .000125 mfd., at 10,000 v.



CLARESSTA

SERIES "M" COMPOSITION-ELEMENT CONTROLS

★ Compactness-yet without sacrificing operating efficiency and long service life. Only 1 1/8" dia. by 18" deep (with switch, %" deep).

Utilizes the exclusive Clarostat stabilized element, insuring the control's constancy in all weather and in all climates. Many years of painstaking research and experience are incorporated into the design of Clarostat Series "M" controls, assuring the user of the best results at all times.

The original Clarostat "Ad-A-Switch" feature makes it possible to adapt any of the Series "A" switches quickly to any M, AM, T and AT controls. Furthermore, for high-voltage television, oscillograph or other electronic circuits, the new Clarostat Series 60 High-Voltage Coupling Unit can be attached to all Clarostat controls (illustrated below) to assure safety at elevated voltages. The cost of this added feature is quite moderate. High-voltage couplers are installed at Dia.: 11/8". Shaft: 21/8



Cal Na		01					me	tal. %-32 brass bushing.
Cat. No.		Ohms	Curve	Suggested Use	Cat. No.	Ohms	Curve	Suggested Use
M-5-S		500	S	Std. Pot.	M-43-S	40,000	S	Std. Pot.
M-8-S		1000	S	Std. Pot.	M-44-S	50,000	S	Std. Pot.
M-11-S		2000	S	Std. Pot.	M-45-W	50,000	W	
M-15-S		3000	S	Std. Pot.	M-46-Z	50,000	ž	Sc. Grid & Phono.
M-80-S		4000	S	Std. Pot.	M-47-S	75,000	2	Auto Grid & Tone
M-19-S		5000	9	Std. Pot.	M-48-V	75,000	10 10	Std. Pot.
M-20-U		5000	FT	Ant. & C - Bias	M-49-S	100,000	v c	C Bias Rheo.
M-23-S	0	7500	š		M-51-Z	100,000	5	Std. Pot.
M-27-S		10.000		Std. Pot.	M-52-S		Z	Audio & Tone
M-29-U		10,000	S	Std. Pot.	M-55-S	200,000	8	Std. Pot.
M-30-V			U	Ant. & C — Bias	M-64-Z	250,000	8	Std. Pot.
M-31-W		10,000	(<u>N</u>	C Bias Rheo.	M-57-S	250,000	Z	Audio & Tone
		10,000	W	Sc. Grid & Phono.	M-57-5 M-58-S	300,000	S	Std. Pot.
M-81-Z		10,000	Z	Ant. Shunt		500,000	S	Std. Pot.
M-32-S		15,000	S -	Std. Pot.	M-59-Y	500,000	Y	Audio Shunt
M-33-U		15,000	U	Ant. & C - Bias	M-60-Z	500,000	\mathbf{z}	Audio & Tone
M-34-V		15,000	V	C Bias Rheo.	M-79-Z	750,000	\mathbf{z}	Audio & Tone
M-35-W		15,000	W	Sc. Grid & Phono.	M-61-S	1,000,000	S	Std. Pot.
M-36-S		20,000	S	Std. Pot.	M-63-Z	1,000,000	Z	Audio & Tone
M-37-U		20,000	Ü		M-66-Z	2,000,000	Z	Tone & AVC
M-40-S		25,000	š	Ant. & C - Bias	M-83-S	2,000,000	S	Audio & Tone
M-41-W		25,000	ŵ	Std. Pot.	M-67-Z	3,000,000	Z	Tone & AVC
M-72-V		25,000	17	Sc. Grid & Phono.	M-68-Z	4,000,000	$\bar{\mathbf{z}}$	Tone & AVC
M-42-S				C Bias Rheo.	M-69-Z	5,000,000	$\tilde{\mathbf{z}}$	Tone & AVC
76-0		30,000	S	Std. Pot.	M-99-Z	10,000,000	ž	Tone & AVC
				LIST DD	ICE 81 05	,		Tone to A v O

LIST PRICE \$1,25

Standard Packing -- 10 (ten) per carton



SERIES "T" TAPPED CONTROLS With the Original Ad-A-Switch Feature

★ There are many circuits in which the use of a tapped control affords special functional operation not possible or attainable with any other type of control. These standard units listed herewith permit replacement of tapped units with the assurance that the total overall resistance value as well as the taps satisfactorily substitute for the original.

Cat. No.	Ohms	Tap No. 1	Tap No. 2	Tap No. 3	Cat. No.	Ohms	Tap No. 1	Tap No. 2	Tap No. 3
T-25	50,000		25,000		T-103	1,000,000			1 ap 140. 3
T-38	200,000		,	100,000	T-109			100,000	
T-39	250,000		25,000	100,000	T-110	1,000,000		225,000	
T-42	250,000		125,000			1,000,000		170,000	
T-43	250,000		120,000	50.000	T-111	1,000,000			200,000
T-44	250,000	60,000		50,000	T-112	1,000,000		500,000	
T-45	250,000	30,000	20.000	125,000	T-95	1,500,000	250,000	@ 25% Rotation	500,000
T-60	350,000	30,000	60,000		T-125	1,500,000		350,000	,
T-69	350,000	75.000	25,000		T-114	2.000,000		100,000	
T-70		75,000			T-115	2,000,000		500,000	
T-78	350.000		75,000		T-116	2,000,000		1,000,000	
	500.000		100,000		T-118	2,000,000	20,000	1,000,000	
T-80	500,000			100,000	T-119		20,000		
T-81	500,000	25.000		100,000	T-120	2,000,000		200,000	
T-82	500,000			200,000		2,000,000		400,000	
T-88	500,000		50,000	400,000	T-121	2,000,000	250,000		500,000
T-90	500,000		250,000		T-124	2,000,000	5,000	@ 25% Rotation	
T-92	500,000	100.000	230,000		T-126	2,000,000	200,000		400.000
T-98	1,000,000	250,000		300,000	T-129	2,000,000	15,000		
T-101	1,000,000	2170,000			T-123	2,500,000	250,000		500,000
T-102		100.000	50,000		T-128	4,000,000		500.000	000,000
17102	1,000,000	100,000		500,000		-,000,000		203,000	

LIST PRICE \$1.85 (Without Switch) For Power Switch, see Series SW listed below. Standard Packing — 10 (ten) per carton



High-Voltage Coupler Fitted to any Clarostat con-trol, at factory, on special order. order. Cat. No. 60-3-2 3.000 v. \$1.25 60-3-4 10,000 v. 1.85

THE ORIGINAL "AD-A-SWITCH" FEATURE FOR SERIES "M", "AM", "T" "AT" CONTROLS

Cat. No.	Wiring	List Price
SW-A SW-A1	Single-Pole Single-Throw	\$0.60
SW-A1	Three-Way, No "Off" position S.P.D.T. Double-Pole, Single-Throw	~-
SW-A4	rour-wire (to control A, B and C voltages)	75
SW-A5 SW-A6	S.r.S.I. (reverse action)	7.5
344-A6	S.P.S.T. with dummy lug	.75



Ad-A Switch is place of usual dust-pro-tection cover, and lugs bent over to hold it in place.

SERIES "AM" AND "AT" UNIVERSAL PICK-A-SHAFT CONTROLS Standard and Tapped for Every Service Need

★ These universal controls are built to the same exacting specifications as Series "M" and "T". However, instead of having the usual integral shaft, these controls include the Clarostat "Pick-A-Shaft" feature whereby a choice of shafts may be used with any of these controls. This ingenious feature elimi-

nates the stocking of special-shaft units. Instead, the Series "AM" or Series "AT" (tapped unit) takes the particular type of shaft desired by merely inserting such a shaft so that the spring washer snaps into the groove provided in the shaft.



One selected shaft furnished FREE with each Pick-A-Shaft control.

SERIES "AT" OR TAPPED SERIES "AM" OR STANDARD PICK-A-SHAFT CONTROLS PICK-A-SHAFT CONTROLS Cat. No. Ohms Curve Suggested Use Ohms Tap No. 1 Tap No. 2 Cat. No. Tap. No.3 AM-5-S AM-8-S AM-11-S M-15-S 500 1,000 Std. Pot. 50,000 25 000 AT-25 200,000 Std. Pot. Std. Pot. Std. Pot. AT-38 100,000 2,000 250,000 25,000 AT-39 AM-80-S 4,000 250,000 125,000 AT-42 Std. Pot. Ant. & C Std. Pot. Std. Pot. AM-19-S 5,000 S AT-43 250,000 50,000 AM-20-U -- Bias 5,000 AM-23-S AM-27-S AM-29-U AM-30-V AT-44 250 000 60.000 125,000 7,500 10,000 SSUVWZSUVWSUSWVSSSWZSVSZSSZSSZSZSZSZZZZ AT-45 250.000 60,000 30,000 Ant. & C — Bias C Bias Rheo. Sc. Grid & Phono. AT-60 350,000 25,000 10,000 Bias 10,000 350,000 AT-69 75,000 AM-30-V AM-31-W AM-81-Z AM-32-S AM-33-U AT-70 350,000 75.000 Ant. Shunt Std. Pot. Ant. & C — Bias C Bias Rheo. Sc. Grid & Phono. 10.000 AT-78 500.000 100.000 100,000 500,000 AT-80 15.000 -- Bias AT-81 500.000 25,000 AM-34-V AM-35-W 15,000 15,000 AT-82 500,000 200,000 AM-36-W AM-36-S AM-37-U AM-40-S AM-41-W AM-72-V Std. Pot. Ant. & C -Std. Pot. 20,000 AT-88 500,000 50 000 20.000 AT-90 500.000 250,000 25,000 25,000 500.000 100.000 300,000 AT-92 Sc. Grid & Phono. C Bias Rheo. AT-98 1,000,000 250.000 25,000 AT-101 1,000,000 50,000 AM-42-S AM-43-S Std. Pot. Std. Pot. 30,000 500.000 AT-102 1,000.000 100 000 40.000 100.000 AM-44-S AM-45-W 50,000 Std. Pot AT-103 1.000.000 Sc. Grid & Phono. Audio & Tone Std. Pot. C Bias Rheo. 1,000,000 225,000 AT-109 AM-46-Z AM-47-S AM-48-V 50,000 AT-110 1,000,000 170,000 AT-111 1,000,000 200,000 75,000 100,000 100,000 C Bias Rheo. Std. Pot. Audio & Tone Std. Pot. Std. Pot. Audio & Tone Std. Pot. Audio Shunt AT-112 1,000,000 500.000 AM-49-S AM-51-Z 500,000 250,000 @ 25% Rotation AT-95 1.500.000 1,500,000 350,000 AM-52-8 AM-55-8 200,000 AT-125 AT-114 2,000.000 100,000 AM-64-Z AM-57-S AM-58-S 250,000 AT-115 2,000,000 500,000 300,000 500,000 AT-116 2.000,000 1.000.000 20.000 2,000,000 AT-118 AM-59-Y AM-60-Z 500,000 Audio & Tone Audio & Tone Std. Pot. Audio & Tone AT-119 2,000,000 200.000 500,000 AT-120 2,000,000 400,000 AM-79-Z AM-61-S 750 000 1,000,000 AT-121 2.000,000 250,000 500,000 AM-63-Z 5.000 @ 25% Rotation AT-124 2,000,000 AM-83-S AM-66-Z 2,000,000 Audio & Tone 200,000 2.000.000 400,000 & AVC & AVC & AVC & AVC & AVC AT-126 Tone 2,000,000 15,000 AT-129 AM-67-Z AM-68-Z Tone 3 000 000 500,000 AT-123 2.500.000 250,000 Tone Tone 4,000.000 4,000,000 500,000 AT-128 AM-69-Z 5.000,000 10,000,000 Tone LIST PRICE \$1.85 (Without Switch)

Standard Packing—10 (ten) per carton. For Power Switch, see Series "SW" listings on Page R-1

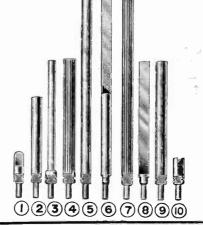
Choice of Pick-A-Shafts

* A choice of Pick-A-Shafts (shown at right) covers all requirements, as follows:

LIST PRICE \$1.25 (Without Switch)

Cat No.	Description
(1) SS-3/8" length	(Male) to take female fitting
(2) RS-2	Round shaft, 2" long
(3) RS-18" diam.	Round shaft, 3" long
(4) KSS-3	Knurled, split shaft 3" lg.
(5) RS-5	Round shaft, 5" long
(6) FS-5	Flatted shaft, 5" long
(7) KSS-5	Knurled, split shaft, 5" lg.
(8) FS-3	Flatted shaft, 3" long
(9) RS-3	Round Shaft, 3" long
(10) DFS-1/2	Double flatted Philco Type 1/2" long
ist price of each sh	aft\$0.30

One selected shaft furnished FREE with each Pick-A-Shaft control.



PICK-A-SHAFT SLIP DRIVE CONTROL (Clutch Type)

A≢ai	lable	with	your	choic	e o	P	ick-A	-Shaft
Cat.	No.		R	esista	псе			List
SD-	64- Z	25	0.000)				\$1.25
SD-	60-Z	50	0,000					1.25
SD-	63- Z	1,00	0.000					1.25
SD-	66-Z	2,00	0,000					1.25
SD-	42	25	0,00	Tap	ped	12	5,000	1.85
SD-	78	50	0.000) '		10	0.000	1.85
SD-	98	1.00	0,000) "	t	25	0.000	1.85
SD-	115	2,00	0,000	, ,	,	50	0,000	1.85

List price of each shaft.

CLAR STAT



MIDGET (15/16" dia.) CONTROLS

★ Yes, sir — Clarostat has it first — the smaller, handier $\frac{1}{18}$ " control for tight spots. And it's a beauty. Note the trim lines. Nothing sacrificed by way of electrical and mechanical sturdiness and dependability. This is an entirely NEW control, developed from scratch, to meet the need of a more compact control of standard performance. Dimensions: $\frac{1}{18}$ " diameter x 29/64" deep. With switch, 49/64" deep. $\frac{1}{4}$ " long, $\frac{3}{8}$ -32 threaded bushing. Knurled shaft 1" long beyond bushing. Switch units attached at factory.

				LIST	PRICE
Cat. No.	Resistance	Taper	Cat. No. with Switch		(with switch)
15/16-64-Z	250,000 ohms	Audio	15/16-S-64-Z	\$1.25	\$1.85
15/16-60-Z	500,000 ohms	Audio	15/16-S-60-Z	1.25	1.85
15/16-63-Z	1,000,000 ohms	Audio	15/16-S-63-Z	1.25	1.85
15/16-66-Z	2,000,000 ohms	Audio	15/16-S-66-Z	1.25	1.85

Standard packing 10 (ten) per carton.

DUAL SERIES DC CONTROLS

★ The Series DC controls are dual units — two controls of the same resistance values and tapers, connected in tandem for joint operation.

Cat. No.	Panel Unit	Rear Unit
DC-34-S	10,000-S	25.000-S
DC-23-S	10,000-S	50,000-S
DC- 5-S	50,000-S	50,000-S
DC- 6-Z	100,000-Z	100,000-Z
DC-29-S	250,000-S	250,000-S
DC- 8-Z	250,000-Z	250,000-Z
DC-10-Z	500,000-Z	500,000-Z
DC-11-Z	1,000,000-Z	1,000,000-Z

LIST PRICE \$3.10

Standard packing-Individual carton

ROTARY SWITCHES

★ Compact, positive contact, bakelite molded and Underwriters' approved. Rated 1 Amp. 250 volt; 3 Amp. 125 volt. The physical dimensions of the switch are as follows:



Diameter $1\frac{3}{3}$ ", body depth $\frac{9}{16}$ ", lug protrusion $\frac{1}{4}$ ", locking projection on a $\frac{1}{3}$ " radius, rotation for actuation 30 degrees.

All standard stock numbers have \%" bushing, 1\\2" length shaft, and one locking projection.

Cat. No.	Switch Description	List Price
8590	Single Pole Single Throw	\$0,60
8591	Single Pole Bussing Lug	
8592	Double Pole Single Throw	
8593	Single Pole Double Throw	
8594	Single Pole Reversed Action	75
8595	Four Wire Single Throw	
	Standard packing 10 (ten) per carton	

POWER RESISTOR DECADE BOX

★ A "Must" for Every Laboratory.

Power resistance measurements under actual load conditions. Just imagine being able to obtain ANY VALUE OF RESISTANCE from 1 ohm to 999,999 ohms IN STEPS OF ONE OHM, and at a POWER

RATING OF 225 WATTS using a maximum of 1000 volts DC (660 volts AC)!

Intended primarily for laboratory use and development engineering. Simplifies and expedites the selection of correct resistance values for given circuits and functions. These instruments are in daily use in labora-



NET PRICE \$90.00*

tories, engineering offices, plants, maintenance and service departments, and in schools.

Finish: Heavy-gauge metal case finished in frosted gray wrinkle. with etched black-and-aluminum front panel.

Dimensions: 13 in. long; 8½ in. deep; 5¾ in. high. Weight, 11 lbs.

Suggested Uses: Resistance determination. Load Resistance. Meter Multiplier. Calibrating Meters. Providing any desired ohmage as a universal power resistor.

SERIES 43 MIDGET WIRE-WOUND CONTROLS

* A space-saving control of the wire-wound type. Similar in mechanical details and dimensions to the composition-element Series M control (page R-1). Precision-wound alloy wire on bakelite strip. Rotor sweeps over inside face of winding. Special lubri-

cant for minimized frictional drag and wear. Molded bakelite casing-high resistance to leakage. Protective metal cover (as shown in illustration). Only 1%" dia. Body Depth, 916; 18 deep with switch. %" bushing. Shaft 11/2" long. All switches permanently attached at factory.



	Current-	Type No.	Type No.
Resistance		Without	With
Ohms	Capacity in Ma.	Switch	Switch
5	630	43-5	438-5
10	450	43-10	438-10
20	320	43-20	438-20
25	280	43-25	438-25
30	260	43-30	438-30
40	225	43-40	438-40
50	200	43-50	438-50
75	165	43-75	438-75
100	140	43-100	43S-100
150	115	43-150	43S-150
200	100	43-200	438-200
300	90	43-300	43S-300
400	70	43-400	438-400
500	65	43-500	43S-500
750	5.5	43-750	438-750
1.000	4 5	43-1000	438-1000
2,000	31	43-2000	438-2000
3,000	26	43-3000	438-3000
4,000	22	43-4000	438-4000
5,000	20	43-5000	43S-5000
7.500	16	43-7500	438-7500
10,000	14	43-10000	43S-10000
10,000		25. With switch	\$1.85
	Standard nacking		

Standard packing - 10 (ten) per carton.

long. Shaft 11/2" lon 3'8" bushing.

SERIES 58 WIRE-WOUND CONTROLS

* Sturdy and reliable in construction yet capable of use for delicate control work. Series 58 Controls are without equal. Noiseless in operation, these units are standard equipment in laboratories, fine instruments, electronic equipment, and especially in the control rooms of radio stations and networks.

The switch is located to operate at extreme counter-clockwise rotation of the shaft. Moving element is insulated from mounting bushing and shaft, and is tested at 500 volts A.C. There is no danger of accidental shock or short-circuit.

Cat. No.	Resistance in Ohms	List Price	Cat. No.	Resistance in Ohms	List Price
58-1	1	\$1.25	58-500	500	1.25
58-2	2	1.25	58-750	750	1.25
58-4	4	1.25	58-1000	1000	1.25
58-6	6	1.25	58-2000	2000	1.25
58-10	10	1.25	58-3000	3000	1.25
58-15	15	1.25	58-5000	5000	1.25
58-20	20	1.25	58-7500	7500	1.25
58-25	25	1.25	58-10K	10,000	1.25
58-30	30	1.25	58-15 K	15,000	1.25
58-40	40	1.25	58-20K	20,000	1.25
58-50	50	1.25	58-25K	25.000	1.60
58-60	60	1.25	58-30K	30,000	1.60
58-75	7 5	1.25	58-40K	40,000	1.60
58-100	100	1.25	58-50K	50,000	2.25
58-200	200	1.25	10-75 K*	75,000	3.50
58-300	300	1.25	10-100 K*	100,000	3.50
58-400	400	1.25		•	

If power switch is desired, the type of switch must be specified (See page R-1). Order as 58S and add to list the price of switch selected. The S.P.S.T. switch is supplied as standard where no type is specified. All switches are permanently fastened to the control at the factory.

Standard packing - 10 (ten) per carton. * These units are 1" in depth and are the Clarostat Series 10.

BEAM BENDER

★ Simplicity and economy mark use of the Clarostat Beam Bender in connection with television cathode-ray tubes requiring some external means of controlling loose Entirely



Applied without tools. self-contained. Three spring fingers provide frictional yet adjustable fit on neck of usual 10" tube. Permanent ring magnets provide magnetic flux proportional to required beam-bending function in the tube. Individually packaged. Cat. No. TV-1 - List Price \$3.00

HAN-D-KIT No. 5



★ Most replacements for least parts stock! Fastest moving items. No duds. Every item a "must" in everyday servicing. Neatly packed in handsome green steel box with hinged top. Handy as filing cabinet, strong box, odds-and-ends box, etc. Contains 6 ballast tubes; 12 volume controls; 4 AD-A-Switches; 5 Greenohms; Dural Hand-D-Wrench; Authorized Service plaque: Data. A \$30.15 value for only: \$15.07 Net Cost* Kit. No. 5

LAREA

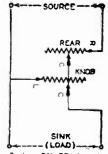
-SOURCE ---REAR 70 CENTER WW 0 KNOB -SINK (LOAD)_ Series CIT-58 T-pads are connected as here shown.

CONSTANT IMPEDANCE CONTROLS

★ Self-compensating volume controls or attenuators known as L-pads and T-pads are essential in eliminating the distortion that arises from the mismatching of impedances in broadcast transmission, sound recording or public address systems. With Clarostat constant-impedance L-pads and T-pads the input and output impedances of associated equipment in a circuit can be kept within the limits of a constant required value.

These pads have a continuous range from 0.5 to 80 decibels attenuation in 90% of rotation, the last 10% affording infinite attenuation. Employable at either the source or the load in a circuit (see diagrams) these units are readily one-hole mounted. They afford a wide range of uses as mixers, faders, multiple-speaker controls, etc. Such controls can be used as individual volume controls for multiplespeaker systems, without affecting or changing the source impedance.

These units are rated at 2 1/2 watts when used on DC or constant frequency signals. However, they have successfully been used up to 10 watts on audio circuits.



Series CIL-58 L-pads are connected as here shown

SERIES CIT Wire-Wound T-Pads

Cat. No.	Resistance in Ohms	List Price
CIT-6	6	\$4.25
CIT-8	8	4.25
CIT-15	15	4.25
CIT-50	50	4.25
CIT-100	100	4.25
CIT-200	200	4.25
CIT-250	250	4.25
CIT-500	500	4.25
CIT-600	600	4.25
CIT-1000	1000	4.25
CIT-2000	2000	4.25



Cat. No.	Resistance in Ohms	List Price
CIL-6 CIL-8	6 8	\$3.75
CIL-15 CIL-50	15	3.75 3.75
CIL-100	50 100	3.75 3.75
CIL-200 CIL-250	200 250	3.75 3.75
CIL-500 CIL-600	500 600	3.75
CIL-1000	1000	3.75 3.75
CIL-2000	2000	3.7 5

SERIES CIL

Wire-Wound L-Pads

db steps are 3, 6, 9, 12, 15, 18, 21, 24 and 30. Absolutely noiseless and distortionless in operation.

★ Developed to meet the need for a constant-impedance attenuator capable of handling considerable power without measurable insertion loss, Series CIB attenuators provide linear attenuation with ample power-handling capacity.

These units are rated at 10 watts when used on DC or constant frequency signals. However, they have successfully been used up to 80 watts on audio circuits.

Compact, capable of safely handling the rated wattages at any setting of the dial, these units are * Developed to meet the need for

recommended as an output level control for power amplifiers or as an input attenuator for individual or group speakers in a public address system. Linear attenuation is provided in steps of 3 decibels up to 30, with final step to infinity.

CONSTANT IMPEDANCE OUTPUT ATTENUATORS

Unit is furnished in black baked-enamel metal casing, 2" in diameter by 2% " long, equipped with dial plate and bar knob. Not available with powerswitch. One-hole mount-ing % " diameter bushing. Shaft ing % long.

Series CIB-10 Watts

	Resistance
Cat. No.	in Ohms
CIB-6	6
CIB-8	8
CIB-15	15
CIB-50	50
CIB-200	200
CIB-250	250
CIB-500	500
CIB-600	600
Net Price	\$6.50*

Series PW-25-25 Watt

Cht. No.	Total Resis.	Max. Cur. at Total Res.	Max. Cur. Up to 1/3 Res.	List
Cat. No.	Ohms	Amps.	Amps.	Price
PW-25-1	1	5.000	7.500	\$5.85
PW-25-2	2	3.536	5.304	5.20
PW-25-3	3	2.887	4.830	5.20
PW-25-6	6	2.041	3.062	5.20
PW-25-8	8	1.768	2.652	5.20
PW-25-10	10	1.581	2.372	5.20
PW-25-15	15	1.291	1.936	5.20
PW-25-25	25	1.000	1.500	5.20
PW-25-35	35	.845	1.268	5.20
PW-25-50	50	.707	1.061	5.20
PW-25-75	7.5	.577	.866	5.20
PW-25-100	100	.500	.750	5.20
PW-25-125	125	.447	.671	5.20
PW-25-175	175	.378	.567	5.20
PW-25-250	250	.316	.474	5.20
PW-25-350	350	.267	.401	5.20
PW-25-500	500	.224	.335	5.20
PW-25-750	750	.183	.274	5.20
PW-25-1000	1000	.158	.237	5.85
PW-25-1500	1500	.129	.194	5.85
PW-25-2500	2500	.100	.150	5.85
PW-25-3500	3500	.085	.127	6.20

Standard Packing-Individual Carton

POWER RHEOSTATS

★Exceptionally rugged. Trouble-free design. Withstand severe ov-erloading without smoking, burn-ing, charring. Element imbedded in cold-setting cement. Resistance winding supported on insulated winding supported on insulated metal core for maximum heat conduction and radiation, even at partial rotation settings. Single-hole mounting. Adjustable locking pin firmly anchors unit against bodily rotation. Shaft and bushing insulated from current-carrying arm for safety. 25 and 50 watt sizes.



Series PW-50—50 Watt

		Max. Cur.		
		at	Max. Cur.	
	Total	Total	Up to 14	
	Resis.	Res.	Res.	List
Cat. No.	Ohms	Amps.	Amps.	Price
PW-50-0.5	0.5	10.000	15.000	\$6.50
PW-50-1	i	7.071	10.607	6.50
PW-50-2	2	5.000	7.500	6.50
PW-50-4	4	3.536	5.804	5.85
PW-50-6	6	2.887	4.330	5.85
PW-50-8	8	2.500	3.750	5.85
PW-50-12	12	2.041	3.062	5.85
PW-50-16	16	1.768	2.652	5.85
PW-50-22	22	1.508	2.261	5.85
PW-50-35	3.5	1.195	1.798	5.85
PW-50-50	50	1.000	1.500	5.85
PW-50-80	80	.791	1.186	5.85
PW-50-125	125	.632	.949	5.85
PW-50-150	150	.577	.866	5.85
PW-50-225	225	.471	.707	5.85
PW-50-300	300	.408	.612	5.85
PW-50-500	500	.316	.474	5.85
PW-50-800	800	.250	.375	6.20
PW-50-1000	1000	.224	.335	6.20
PW-50-1600	1600	.177	.265	6.20
PW-50-2500	2500	.141	.212	6.20
PW-50-3500	3500	.120	.179	6.50
PW-50-5000	5000	.100	.150	6.50

Standard Packing-Individual Carton

TUBE-TYPE WIRE-WOUND RESISTORS

Standard

Resisto	Tubes
Cat. No.	Cat. No.
BK-29-B	K-74-B
BK-29-D	K-80-B
BK-32-D	K-82-B
BK-36-B	K-86-B
BK-36-D	K-90-A
BK-36-II	K-90-B
BK-42-B	K-92-A
BK-42-C	K-92-B
BK-49-B	142-B
BK-49-C	L-42-C
BK-55-B	L-42-D
BK-67-BJ	L-49-A
BL-42-B	L-49-B
BL-42-D	L-49-C
BM-49-B	L-49-D
BM-55-B	L-49-II
K-26J-218 K-36-D	L-55-B L-55-CJ
K-42-A	L-55-C
K-42-AJ	L-55-CPR
K-42-B	L-55-D
K-42-C	M-30-H
K-42-D	M-42-B
17 40 4	36 40 10
K-49-B	M-55-B
K-49-C	M-55-11
K-49-D	M-80-B
K-49-H	M-55-B M-55-H M-80-B M-86892-9
K-55-A	10-610
K-55-B	10-610 100-37
11-00-0	100 10
K-55-CPR	100-76
K-55-D	100-77
K-55-H	100-79
K-67-A	115-78
K-67-B	5459
K-67-BJ	28602
K-72-B	43X106
List Price	s\$1.00
	Packing
10 pc	er carton

★ Clarostat developed and pioneered the tube-type resistor for voltage-reducing purposes and for supplying needed voltage for pilot lamp operation in AC-DC receivers. Strictly non-inflammable, with the resistance element wound on a mica form firmly secured in the metal tube and connected with the base prongs, the Clarostat construction is notably superior to others.

uase prongs, the Clarostat const superior to others.

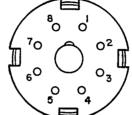
To simplify servicing of receivers using tube-type resistors. Clarostat has selected the most popular values for so-ealled Universal numbers serving most replacement needs. Standard resistor tubes of the most popular types are also listed below.

In connection with listings, the following nomenclature applies: Prefixes: K denotes 6.3 volt 150 ma. No. 40 pilot lamp.

L denotes 6.3 volt 250 ma. No. 46 pilot lamp.

M denotes 6.3 volt 200 ma. No. 51 pilot lamp.

The numeral indicates total voltage drop across resistance unit.



Suffixes designate: fflixes designate:

—No pilot lamp taps.

—1 pilot lamp tap for 1 lamp.

—1 pilot lamp tap for 2 lamps.

—2 pilot lamp taps for 2 lamps.

—3 pilot lamp taps for 3 lamps.

—1 pilot lamp tap for 3 lamps.

—1 pilot lamp tap for 3 lamps. G -1 pilot lamp tap for 2 pilot

lamps. (Tapped sections isolated from main reducing body.)

- A - 5

II —2 pilot lam, taps for 2 pilot lamps.

(Tapped section isolated from main reducing body.)

The letter "J" following any of the suffixes denotes a shorted connection between 2 prongs of the tube, i.e., K-67-BJ, the short is located between Nos. 3 and

the short is located between Nos. 3 and 4 prongs.

Care must be exercised when replacing any tube whose number ends in "J", as the shorted pins are not always as in above example. Some are between Nos. 6 and 7 prongs, and others between 5 and 3.

When replacing any plug-in resistor tube with a Clarostat Universal type, note prongs missing on replaced tube and cut off corresponding prongs on the Universal Replacement tube.

The numeral indicates total voltage drop across resistance unit.

UNIVERSAL RESISTOR TUBES

Universal Tube No.	Replaces AC-DC Tubes Beginning with Letters	Having Numbers From	Ending in Letter
10*23-A	BK, BL, K, L, M	10 to 23	A, B, C, D
10*23-E	BK, BL, K, L, M	10 to 23	E
10*23-F	BK, BL, K, L, M	10 to 23	F, G, H
23*55-A	BK, BL, K, L, M	23 to 55	A, B, C, D
23*55-E	BK, BL, K, L, M	23 to 55	E
23*55-F	BK, BL, K, L, M	23 to 55	F, G, H
60*92-A	BK, BL, K, L, M	60 to 92	A, B, C, D
60*92-E	BK, BL, K, L, M	60 to 92	E
60*92-F	BK, BL, K, L, M	60 to 92	F. G. H
92*105-A	BK, BL, K, L, M	92 to 105	A, B, C, D
	List Price	\$1.50	

Standard Packing - 10 (ten) per carton

TELEVISION BALLASTS

*17A470303 for Motorola Television Set No. VT-71. List Price \$3.00 **397021 for Emerson Television Set No. 571-606. List Price \$3.00

This Emerson ballast tube is used as a protective resistor and any internal failure in the circuit may cause this unit to burn out and therefore this unit is expendable. Standard Packing - 10 (ten) per carton



GLASOHMS* Glass-Insulated Flexible Resistors

* This is a new development in resistors which has found instant acceptance in widespread applications.

Glasohms consist of a wire winding on a fibreglass core, with a covering of braided fibre-glass, Each strand of glass is no thicker than usual

cotton thread and just as flexible, so that the complete units can be bent or twisted and even knotted without breakage or weakening. Clarostat is the only manufacturer of Glasohms. These units are ideal for resistance boxes, attenuators, voltage-dividers, multipliers, step-bystep rheostats, and for use in point-to-point wiring jobs. Handy, inexpensive and very durable, these units can withstand heavy overloads without damage. There is nothing in them to burn or char. Glasolims are also suitable for use as miniature heating elements serving in hair curlers, immersion heaters, soldering irons, electrically-heated ovens for crystal oscillators, etc., especially in longer lengths obtained on *Registered trade-mark. special orders.

Standard Glasohm Resistors

TYPE FYG — 2-WATT Fabric Length with 2" Pigtails dia, core. RMA Color-coded

Cat. No.	Ohms	Cat. No.	Ohms
FYG5	5	FYG350	350
FYG10	10	FYG375	375
FYG15	15	FYG400	400
FYG25	25	FYG500	500
FYG35	35	FYG600	600
FYG40	40	FYG700	700
FYG50	50	FYG750	750
FYG60	60	FYG800	800
FYG75	75	FYG850	850
FYG100	100	FYG900	900
FYG125	125	FYG1000	1000
FYG150	150	FYG1250	1250
FYG200	200	FYG1500	1500
FYG225	225	FYG1600	1600
FYG250	250	FGY1750	1750
FGY300	300	FYG2000	2000

List Price......\$0.30 Standard Packing-10 (ten) per carton

AUTOMATIC LINE VOLTAGE REGULATORS

* To maintain constant line voltage and thus prevent burning out the tubes of a radio receiver or other tube-using device, this handy unit, operating effectively on 110-volt A.C. or D.C. by simply plugging into the usual socket or outlet, safeguards against line voltage surges or increases even up to 140 volts. At the normal 110-volt, the resistance of the unit is low and the voltage drop across it is negligible, However, as the line voltage increases the resistance of the unit increases proportionately, with a constant increase in voltage drop across it. This automatic voltage control or ballast action insures a steady, practically constant and always safe operating potential.



	Dimensions	are 1 1/4 " dia. x 1 1/4 " ion	۴٠
		Prongs %" long.	
ype	Rating	For Use With	No. of
No.	Watts	Sets Consuming	Tubes Used
0	50	Up to 60 watts	4
Λ	100	60 to 100 watts	5, 6, 7
В	150	100 to 150 watts	8, 9, 10
C	200	150 to 200 watts	11, 12
D	250	200 to 250 watts	2 Type 50
E*	100	60 to 100 watts	

ongiona and 13/ " dia - 13/ " long

*Note: For use with 220-volt receivers List Price\$1.75 Standard Packing - 10 (ten) per carton

CLARESSTAT

FAMOUS GREENOHMS — WIRE-WOUND FIXED POWER RESISTORS

★ The toughest power resistors made. Will dissipate heat without change in resistance value. Will withstand heavy overloads, humidity, high-heat, and severe heat shock (frequent on-and-off operation). Due to the exclusive CLAROSTAT inorganic-cement coating,

these resistors can be given the toughest assignments and will come through with flying colors. Greenohms are found in the finest electrical, radio and industrial assemblies — in equipment that must stand up — for functions where failure cannot be tolerated.



	1					
SERIES PR-5-F-5-WATT		Series K-50-N	Series K-80-N	Series K-100-W	Series K-160-W	Series
Dimensions: 16" dia, x 1" long.			% dia.	11/8" dia.	1 1/8" dia.	K-200-V
The baby member of the famous Clarostat Greenohm family. Available		34" dia. x 4½" 1.	x 6½" 1.	x 6 ½ " 1.	x 8½" 1.	1 1/8" dia. x 10 1/2" 1
III BLANGARU FENDEAUCE VALUES from 1 olim to 7500 olima (Can aucust	Ohms	50-watt	80-watt	115-watt	160-watt	200-wat
varies in listings for Series AC-10-F up to 7500).	5	\$1.10	\$1.25	\$1.75	\$2.25	\$2.50
All ohmages List Price \$0.50	10	1.10	1.25			
Standard Packing - 10 (ten) per carton.	25	1.10		1.75	2.25	2.50
			1.25	1.75	2.25	2.50
Series AC-10-F—10-Watt Series AC-20-K—20-Watt	50	1.10	1.25	1.75	2.25	2.50
Dimensions: 18" dia. x 134" long Dimensions: 18" dia. x 2" long	75	1.10	1.25	1.75	2.25	2.50
Ohms Ohms Ohms Ohms Ohms	100	1.10	1.25	1.75	2.25	2.50
Ohms Ohms Ohms 1 800 6000 65000	150	1.10	1.25	1.75	2.25	2.50
1 125 1200 10000 5 850 7000 70000	200	1.10	1.25	1.75	2.25	2.50
2 150 1250 11000 25 1000 7500 75000	250	1.10	1.25	1.75	2.25	2.50
200 1300 12000 50 1950 0000 05000	300	1.10	1.25	1.75	2.25	2.50
75 1500 12500 75 1500 10000 00000	400	1.10	1.25	1.75	2.25	2.50
7.5 300 2250 14500 100 1750 12500 95000	500	1.10	1.25	1.75	2.25	$\frac{2.50}{2.50}$
10 350 2500 15000 150 1850 15000 100000	750	1.10	1.25	1.75	2.25	
12 400 3000 16000 200 2000 2000	1.000	1.10				2.50
3500 17500 300 2500 20000	1,250		1.25	1.75	2.25	2.50
20 300 4000 18000 350 9750 95000	/	1.10	1.25	1.75	2.25	2.50
30 700 5000 20500 400 3000 40000	1,500	1.10	1.25	1.75	2.25	2.50
35 750 6000 25000 500 3500 45000	2,000	1.10	. 1.25	1.75	2.25	2.50
40 800 7000 30000 650 4000 50000	2,250	1.10	1.25	1.75	2.25	2.50
50 900 7500 35000 750 5000 60000	2,500	1.10	1.25	1.75	2.25	2.50
1000 8000 40000	3,000	1.10	1.25	1.85	2.25	2.50
100 1100 8500 50000 LIST PRICE: 1 to 15,000 ohms\$0.65	3,500	1.10	1.25	1.85	2.25	2.50
All ohmages — List Price \$0.55 20,000 to 50,000 ohms 85	4,000	1.10	1.25	1.85	2.25	2.50
Standard Packing 10 (4cm) 55,000 to 100,000 ohms 1.10	4,500	1.10	1.25	1.95	2.25	2.50
Standard Packing — 5 (five)	5,000	1.10	1.25	1.95		
per carton per carton	6,000	1.35	1.50		2.25	2.50
Series A-25-K—25-Watt	7,500	1.35 1.35		1.95	2.25	2.50
Dimensions: %" dia. x 21/2" long Series K-40-N-40-Watt	8,000		1.50	1.95	2.25	2.50
Dimongiona, 3/1/ 31 01/1/ 1		1.35	1.50	1.95	2.25	2.50
Ohms Ohms Ohms Ohms Ohms Ohms 1 150 2250 10000 75000	9,000	1.35	1.50	1.95	2.25	2.50
2 200 2500 12000 80000 Ohms Ohms Ohms Ohms Ohms	10,000	1.35	1.50	1.95	2.25	2.50
3 250 3000 15000 85000 5 125 1000 7500 35000 125000	12,000	1.35	1.50	1.95	2.30	2.75
5 300 3500 20000 90000 10 150 1500 8500 40000 150000	12,500	1.35	1.50	1.95	2.35	2.85
7.5 400 4000 25000 100000 15 200 2000 10000 50000 175000 10 500 4500 30000	15,000	1.35	1.50	1.95	2.65	3.00
15 750 5000 35000 20 250 2500 12500 60000 200000	20,000	1.35	1.50	1.95	2.65	3.00
20 800 6000 40000 25 300 3000 15000 70000	25,000	1.35	1.50	1.95	2.65	3.00
25 1000 7000 45000	30,000	1.70	1.75	2.50	2.65	3.00
50 1250 7500 50000 75 1500 8000 60000 75 500 5000 25000 90000	35,000	1.70	1.75	2.50	2.65	3.00
100 2000 9000 70000 100 750 6000 30000 100000	40,000	1.70	1.75	2.50	2.65	3.00
LIST PRICES:	50,000	1.70	1.75	2.50	2.65	3.00
1 to 5000 ohms\$0.75 LIST PRICES.	60,000	1.70	2.00	2.75	3.00	
6000 to 15000 ohms 85	70,000	1.70	2.00	2.75		3.00
20000 to 50000 ohms 1.00 5 to 5000 ohms\$0.90	75,000	1.70	2.00		3.00	3.00
60000 ohms 1.15 6000 to 25000 ohms 1.00 70000 ohms 1.25 20000 to 100000 hms 1.00	80,000	1.70		2.75	3.00	3.00
75000 ohms	100,000		2.10	2.85	3.00	3.00
80000 ohms		1.70	2.25	3.00	3.00	3.00
85000 ohms 1.50 175000 ohms 1.50	125,000	2.00		3.10	3.20	3.75
90000 ohms 1.60 100000 ohms 1.75 200000 ohms 1.60	150,000	2.25		3.25	3.50	3.75
Constitution of the consti	175,000	2.25		3.35		
Brackets at No Extra Cost Supplied with Mounting Brackets at	200,000	3.00		3.75		
Standard Packing — No Extra Cost	All resis	tors furn	ished wit	h mountir	or brooks	ta at ===
Individually Boxed Standard Packing—Individually Boxed	extra co	st Stan	dard Doo	king — Ind	ie pracke	is at no
	-Acid CO	ou otali	uaru rac	ang — m	iividually	Boxed.

GREENOHM JR. WIRE-WOUND RESISTORS

★ Handy, inexpensive, ceramic-cased midget wire-wound resistors for tight spots, especially with point-to-point wiring. These tiny resistors take the place of more cumbersome and costlier bracket-mounted units. This "junior" version of the well-known Greenohm power resistors features a wire winding on fibre-glass core, 1½" axial pigtail leads, and a steatife protective casing sealed with exclusive Greenohm cold-setting inorganic cement. This resistor will not blister, crack, or change shape. Type C7GJ, 1¾" long by ¾" dia., rated at 7 watts. Smaller Type C4GJ, 1" long by ¼" dia., rated at 4 watts. In characteristic Greenohm green, with printed values on casing.





CLARES STAT

FAMOUS GREENOHMS - WIRE-WOUND ADJUSTABLE POWER RESISTORS



★ These power resistors feature the exclusive Clarostat inorganic cement coating and are similar in rugged construction to the fixed types on page R-7. except for the bared section of the winding contacted at any ohmage by the adjustable slider band. This band is permanently locked in place at the required resistance value by simply tightening a screw.

GREENOHM KIT

★ Here's a simple means of keeping 20 of the most popular 10-watt power resistors always at your finger-tips. Each Greenohm is held by metal clip on the wall chart. Slide off unit and value appears on wall chart, for handy reordering.

Cat. No. GK-1 LIST PRICE \$11.00



DIMENSIONS

★ Fixed and Adjustable Greenohms are of the same dimensions, wattage for wattage, as follows:

Rating	Dia.		Lgth.
10-watt	16"	x	1¾"
20-watt	9 "	x	2"
25-watt	$\frac{9}{16}''$	x	2½"
40-watt	3/4 ′′	х	3½"
50-watt	3/4 "	X	41/2"
80-watt	3/4 "	Х	61/2"
100-watt	11/8"	х	6½"
160-watt	11/8"	х	81/2"
200-watt	11/8"	x	101/2"

SERIES AC-10-FA-10-WATT

	Dimensions: 15"	dia. x 13/4" lon	g
Ohms	Ohms	Ohms	Ohms
1	100	1000	6000
2	150	1250	7000
3	200	1500	7500
5	250	2000	8000
7.5	300	2250	8500
10	350	2500	9000
15	400	3000	10000
20	500	3500	
25	600	4000	
50	750	4500	
75	800	5000	

LIST PRICE: All Sizes: \$0.85 Standard Packing — 10 (ten) per carton

SERIES A-25-KA-25-WATT

	Dimensions: 9"	dia. x 2½" long	
Ohms	Ohms	Ohms	Ohms
1	100	1500	7500
	150	2000	8000
2 3 5	200	2250	9000
5	250	2500	10000
7.5	300	3000	12000
10	400	3500	15000
1.5	500	1000	20000
20	750	4500	25000
25	800	5000	50000
5.0	1000	6000	
75	1250	7000	
	LIST	PRICES:	

			TIPI	PRICES:
1	to	5000	ohms	\$0.95
6000	to	15000	ohms	1.10
20000	to	25000	ohms	1.25
50000	oh	11118		

Supplied with Mounting Brackets at No Extra Cost.

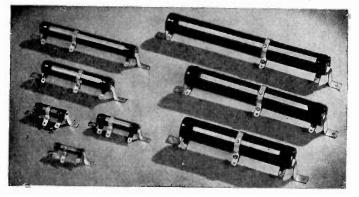
Extra Slider Bands........\$0.10 each
Standard Packing — Individually Boxed

Ohms	Series K-50-NA ¾" dia. x 4½" 1. 50-watt	Series K-80-NA 3/4" dia. x 61/2" 1. 80-watt	Series K-100-WA 1 1/8" dia. x 6 1/2" 1. 115-watt	Series K-160-WA 11/8" dia. x 81/2" 1. 160-watt	Series K-200-WA 1 1/8" dia. x 10 1/2" 1. 200-watt	Ohms	Series K-50-NA ¾" dia. x 4½" 1. 50-watt	Series K-80-NA ¾" dia. x 6½" 1. 80-watt	Series K-100-WA 11/8" dia. x 61/2" 1. 115-watt	Series K-160-WA 1 1/8" dia. x 8 1/2" 1. 160-watt	Series K-200-WA 1 1/8" dia. x 10 1/2" 1. 200-watt
5	\$1.50	\$1.75	\$2.00	\$2.50	\$3.00	5,000	\$1.50	\$1.75	\$2.25	\$2.65	\$3.25
10	1.50	1.75	2.00	2.50	3.00	6,000	1.75	2.00	2.25	2.65	3.25
15	1.50	1.75	2.00	2.50	3.00	7.000	1.75	2.00	2.25	2.65	3.25
20	1.50	1.75	2.00	2.50	3.00	7,500	1.75	2.00	2.25	2.65	3.25
25	1.50	1.75	2.00	2.50	3.00	8,000	1.75	2.00	2.25	2.65	3.25
50	1.50	1.75	2.00	2.50	3.00	9,000	1.75	2.00	2.25	2.65	3.25
75	1.50	1.75	2.00	2.50	3.00	10,000	1.75	2.00	2.25	2.65	3.25
100	1.50	1.75	2.00	2.50	3.00	12,000	1.75	2.00	2.25	2.90	3.50
150	1.50	1.75	2.00	2.50	3.00	15,000	1.75	2.00	2.25	3.25	3.75
200	1.50	1.75	2.00	2.50	3.00	20,000	1.75	2.00	2.25	3. 2 5	3.75
250	1.50	1.75	2.00	2.50	3.00	25,000	1.75	2.00	2.85	3. 25	3.75
300	1.50	1.75	2.00	2.50	3.00	30.000	2.00	2.25	2.85	3.25	3.75
400	1.50	1.75	2.00	2.50	3.00	35,000	2.00	2.25	2.85	3.25	3.75
500	1.50	1.75	2.00	2.50	3.00	40,000	2.00	2.25	2.85	3.25	3.75
750	1.50	1.75	2.00	2.50	3.00	45,000	2.00	2.25	2.85	3. 25	3.75
1,000	1.50	1.75	2.00	2.50	3.00	50,000	2.00	2.25	3.00	3.25	3.75
1,250	1.50	1.75	2.00	2.50	3.00	60,000	2.50	2.50	3.00	3.75	3.75
1,500	1.50	1.75	2.00	2.50	3.00	75,000	2.50	2.50	3.15	3.75	3.75
2,000	1.50	1.75	2.00	2.50	3.00	80,000	2.50	2.50	3.15	3.75	3.75
2,500	1.50	1.75	2.00	2.50	3.00	100,000	2.50	2.50	3.65	3.75	3.75
3,500	1.50	1.75	2.00	2.50	3.00	125.000			4.00	4.25	
4.000	1.50	1.75	2.00	2.50	3.00	150,000			4.25	4.25	
4,500	1.50	1.75	2.25	2.50	3.00			no orteo .	4		

All resistors furnished with mounting brackets at no extra cost.
Standard Packing — Individually Boxed.

LECTROHM Enameled Vitreous RESISTORS

Quality—Accuracy—Dependability—Long Life



WIRE WOUND ADJUSTABLE TYPES

The same high quality and construction are used for LECTROHM Adjustable Resistors as are incorporated in LECTROHM fixed units.

These resistors are used for replacing voltage dividers in radio receivers, for radio transmitter power supply, and for general experimental work.

TYPE 1% EV-10-WATT

	TING B		T	.10,000 .Center	
Res. Ohms	Max. M.A.	List Price	Res. Ohms	Max. M.A.	List Price
1	3150	\$0.98	750	115	\$0.98
2	2230	.98	800	111	.98
3	1825	.98	1000	100	.98
5	1415	.98	1250	89	.98
7.5	1155	.98	1500	79	.98
10	1000	.98	2000	69	.98
15	815	.98	2250	64	.98
20	707	.98	2500	61	.98
25	630	.98	3000	56	.98
50	447	.98	3500	51	.98
75	365	.98	4000	47	.98
100	315	.98	4500	4.4	.98
150	258	.98	5000	40	.98
200	223	.98	6000	36	.98
250	200	.98	7000	33	.98
300	182	.98	7500	32	.98
350	169	.98	8000	31	.98
400	158	.98	8500	30	.98
500	141	.98	10000	24	.98
600	129	.98			

TYPE 2SV-25-WATT

				.Center	/6
Res. Ohms	Max. M.A.	List Price	Res. Ohms	Max. M.A.	List Price
1	5000	\$1.24	1000	158	\$1.24
3	2890	1.24	1250	141	1.24
5	2240	1.24	1500	129	1.24
10	1580	1.24	2000	112	1.24
15	1290	1.24	2500	100	1.24
25	1000	1.24	3000	91	1.24
50	707	1.24	3500	84	1.24
75	575	1.24	4000	79	1.24
100	500	1.24	5000	71	1.24
150	400	1.24	6000	64	1.43
200	353	1.24	7500	57	1.43
250	316	1.24	10000	50	1.43
300	238	1.24	12000	4 4	1.43
400	250	1.24	15000	26	1.43
500	224	1.24	20000	22	1.56
750	182	1.24	25000	20	1.56

TYPE 41/2 MV-50-WATT

DIME	NSIONS.		3/4"		
IERM	INALS			Sold	er Lugs
MAXI	MUM R	ESISTAN	CE1	100,00	0 ohms
MOUN	ITING E	BRACKE	T	Center	s 5½"
Res.	Max.	List	Res.	Max.	List
Ohms	M.A.	Price	Ohms	M.A.	Price
5	3160	\$1.95	3000	129	\$1.95
10	2230	1.95	4000	112	1.95
- 25	1410	1.95	5000	100	1.95
50	1000	1.95	7500	81	2.15
75	816	1.95	10000	70	2.15
100	707	1.95	12000	64	2.15
150	577	1.95	15000	57	2.15
200	500	1.95	20000	50	2.15
250	447	1.95	25000	44	2.15
300	408	1.95	30000	41	2.47
400	354	1.95	40000	35	2.47
500	316	1.95	50000	20	2.47
750	258	1.95	60000	18	2.86
1000	224	1.95	75000	17	2.86
1500	182	1.95	80000	16	2.86
2000	158	1.95	100000	14	2.86
2500	141	1.95			

TYPE 61/2 MV-80-WATT

		♥ / Z IVI			
DIME	NSIONS.		3/4"	x 1/2"	x 61/5"
TERM	INALS			Sold	er Lua:
MAXII	MUM RI	ESISTAN	ICE 1	100.00	O ohm
MOUN	TING E	RACKE	T	Center	s 71/2"
Res.	Max.	List	Res.	Max.	List
Ohms	M.A.	Price	Ohms	M.A.	
10	2830	\$2.54	3500		\$2.54
15	2310	2.54	5000	126	2.54
25	1790	2.54	7500	103	2.86
50	1265	2.54	10000	89	2.86
100	894	2.54	15000	73	2.86
250	566	2.54	20000	63	2.86
300	517	2.54	25000	57	2.86
400	495	2.54	30000	51	3.25
500	400	2.54	40000	44	3.25
750	327	2.54	50000	25	3.25
1000	283	2.54	60000	23	3.58
1500	231	2.54	75000	21	3.58
2000	200	2.54	80000	20	3.58
2500	179	2.54	100000	18	3.58

ADJUSTABLE LUGS

-18	Diameter of Resistor	List Price
	3/8"	\$0.13
	5% "	.13
Screw-Driver	7/8 "	.20
Туре	1 1/4 "	.20

TYPE 61/2 KV-100-WATT

		W / A	-100-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
DIMEN	SIONS		11/8" x	3/4"	x 61/-"
TERMI	NALS			Sold	er Luge
MAXIN	AUM RI	ESISTAN	(CE)	00.00	0 ohme
MOUN	TING E	RACKE	T	Center	\$ 71/2"
Res.	Max.	List	1 Res.	Max.	List
Ohms	M.A.	Price	Ohms	M.A.	
50	1413	\$2.86	15000	81	\$3.25
100	1000	2.86	20000	70	3.25
500	447	2.86	25000	63	3.25
1000	316	2.86	30000	57	3.58
2000	223	2.86	35000	53	3.58
3000	182	2.86	40000	50	3.58
4000	158	2.86	50000	4.4	3.58
5000	141	2.86	75000	23	3.90
7500	115	3.25	100000	20	3.90
10000	100	3.25			2.20

TYPE 81/2 KV-160-WATT

DIMENSIONS	Solder Lugs
MAXIMUM RESISTANCE MOUNTING BRACKET	100,000 ohms
MOONING BRACKET	

Res. Ohms	Max. M.A.	List Price	Res. Ohms	Max. M.A.	List Price
5	5660	\$3.58	10000	126	\$3.58
10	4000	3.58	15000	103	4.16
25	2530	3.58	20000	89	4.16
50	1788	3.58	25000	80	4.16
100	1266	3.58	30000	73	4.16
500	566	3.58	40000	5.5	4.16
1000	400	3.58	50000	43	4.16
2500	253	3.58	75000	27	4.55
5000	179	3.58	100000	18	4.55

TYPE 101/2 KV-200-WATT

DIMENSIONS11/8" TERMINALS	x 3/4" x 101/2"
MAXIMUM RESISTANCE MOUNTING BRACKET	100.000 ohms

Res. Ohms	Max. M.A.	List Price	Res. Ohms	Max. M.A.	List Price
50	2000	\$4.29	10000	141	\$4.29
100	1414	4.29	20000	100	5.00
500	632	4.29	25000	89	5.00
1000	447	4.29	30000	81	5.00
1500	361	4.29	50000	63	5.00
2000	316	4.29	75000	51	5.00
2500	283	4.29	100000	28	5.00
5000	200	4.29		_	

Mounting brackets and one band are furnished with all adjustable types.

itreous Enameles

Quality—Accuracy—Dependability—Long Life

WIRE WOUND—FIXED TYPES

LECTROHM Resistors are manufactured from the highest quality materials obtainable and are rated according to R.M.A. standards. LECTROHM Resistors are rugged-dependable - accurate - quality components that will give long trouble-free service.

(Mounting brackets available for 20, 50, 80,



NO MODILITY BLACKETS						
Max. M.A.	List Price	Res. Ohms	Max. M.A.	List Price		
2240	\$0.52	300	129	\$0.52		
	.52	350	119	.52		
	.52	400	111	.52		
	.52	500	100	.52		
	.52	600	91	52		
		700	84	.52		
		750	81	.52		
		800	79	.52		
		900	7.4	.52		
		1000	70	.52		
		1100	61	.52		
		1200	60	.52		
			59	.52 .52		
			54	.52		
222			50	.52		
			44	.52		
	.52		40	.52		
				.52		
			31	.52		
				.52		
	Max.	Max. List M.A. M.A. Price 2240 \$0.52 1280 .52 1290 .52 1110 .52 1000 .52 5707 .52 570 .52 447 .52 374 .52 374 .52 316 .52 222 .52 200 .52 200 .52 182 .52 188 .52 149 .52	Max. List M.A. Res. Ohms M.A. Price Ohms 1580 \$0.52 1290 \$52 1290 \$52 1200 \$52 1000 \$52 600 600 707 \$52 500 \$52 800 \$447 52 900 447 \$52 900 448 \$52 1100 374 \$52 1100 346 \$52 1200 316 \$52 1250 258 \$52 1500 222 \$52 \$250 362 \$52 2000 182 \$52 2000 182 \$52 2000 149 \$52 3000	Max. List M.A. Res. Ohms Max. M.A. 2440 \$0.52 300 129 1289 \$0.52 350 119 1290 52 400 111 1110 .52 500 100 1000 .52 600 91 707 .52 700 84 575 .52 750 81 500 .52 800 79 447 .52 900 74 408 .52 1100 61 374 .52 1100 60 316 .52 1200 60 316 .52 1500 54 222 .52 1500 54 222 .52 1500 40 182 .52 2500 40 158 .52 3000 36 149 .52 4000 31		

TYPE 13/4-10-WATT	
DIMENSIONS	I¼″ Tail
MAXIMUM RESISTANCE	ohms

Res. Ohms	Max. M.A.	List Price	Res. Ohms	Max. M.A.	List Price
1	3150	\$0.59	1500	79	\$0.59
2	2230	.59	1750	74	.59
3	1825	.59	2000	69	.59
2 3 5	1415	.59	2250	64	.59
7.5	1155	.59	2500	61	.59
10	1000	-59	3000	56	.59
15	815	.59	3500	51	.59
20	707	.59	4000	47	.59
25	630	.59	4500	44	.59
50	447	.59	5000	40	.59
75	365	.59	6000	36	.59
100	315	.59	7000	33	.59
150	258	.59	7500	-32	59
200	223	.59	8000	31	.59
250	200	.59	8500	30	.59
300	182	.59	10000	24	.59
350	169	.59	12000	20	.65
400	158	.59	12500	20	.65
500	141	.59	15000	18	.65
600	129	.59	17500	17	.65
700	119	.59	18000	16	.65
750	115	.59	20000	15	.65
800	111	.59	22500	15	.65
900	105	.59	25000	14	.65
4000	100	.59	30000	8	.65
200	91	.59	40000	7	.65
1250	89	.59			

LECTROHM R. F. PLATE CHOKES



Type	RFC-1	RFC-2	RFC-3	RFC-4
Amateur				20, 40
Band Meters	5	10 & 20	20 & 40	80 & 160
Microhenries	5.4	35	95	220
D. C. Ohms	0.85	2	5	9
Lgth, Overall		3"	6"	6 1/2 "
Diameter	1/4 "	18"	16"	% "
List Price	\$0.33	\$1.04	\$1.56	\$2.15

TYPE 2R-20-WATT

	TYPE	E 2R-	-20-W	ATT A	
DIMEN	SIONS			1/2" x 5	" x 2"
TERMI	NAIS			Sold	er Lug
MAYIM	IIM RES	ISTANI	CE		0 ohms
MOUNT	TING BR	ACKET		Center	s 27/a"
Res.	Max.	List	Res.	Max.	List
Ohms	M.A.	Price	Ohms	M.A.	Price
5	2000	\$0.91	1100	131	\$0.91
10	1414	.91	1250	126	.91
15	1153	.91	1500	115	.91
20	1000	.91	2000	100	,91
25	894	.91	2500	89	.91
40	707	.91	3000	81	,91
50	633	.91	1000	70	.91
60	574	10.	5000	63	.91
75	517	.91	6000	57	.91
100	448	.91	7000	53	.91
125	400	.91	7.500	51	.91
150	:365	.91	8000	50	.91
200	316	.91	10000	43	.91
250	283	.91	12500	39	.91
300	258	.91	15000	30	.91
350	238	.91	20000	21	1.11
400	223	.91	25000	21	1.11
-500	200	.91	30000	21	1.14
600	182	.91	35000	18	1.11
700	169	.91	40000	17	1.11
750	163	.91	15000	13	1.11
800	158	.91	50000	11	1.11
1000	141	.91	L		

TYPE 41/2 M-50-WATT

DIMENSIONS 3/4" x ½" x 4½" TERMINALS Solder Lugs MAXIMUM RESIST*NCE 100,000 ohms MOUNTING BRACF'T Centers 5½"						
Res. Ohms	Max. M.A.	List F′rice	Res.	Max. M.A.	List Price	
5	3165	\$1.56	6000	85	\$1.82	
10	2230	1.56	7000	78	1.82	
25	1390	1.56	7500	77	1.82	
50	1000	1.56	8000	75	1.82	
100	700	1.56	10000	66	1.82	
200	500	1.56	12000	63	1.82	
250	440	1.56	12500	60	1.82	
500	300	1.56	15000	56	1.82	
750	250	1.56	20000	48	1.82	
1000	215	1.56	25000	43	1.82	
1500	175	1.56	30000	39	2.08	
2000	155	1.56	40000	34	2.08	
2500	135	1,56	50000	30	2.08	
3000	120	1.56	60000	28	2.08	
4000	105	1.56	75000	25	2.08	
5000	95	1.56	100000	91	2.08	

TYPE 61/2 M-80-WATT

MAXIM	NALS	SISTAN	CE	Solde	er Lugs } ohms
- 5	4000	\$2.04	5000	122	\$2.04
10	2730	2.04	6000	112	2.41
25	1730	2.04	7500	100	2.41
50	1220	2.04	8000	98	2.41
100	865	2.04	10000	86	2.41
200	612	2.04	15000	70	2.41
250	545	2.04	20000	61	2.41
500	387	2.04	25000	55	2.41
750	- 316	2.04	30000	50	2.72
1000	27	2.04	50000	43	2.72
1500	223	2.04	50000	39	2.72
2000	193	2.04	60000	3.5	3.09
2500	173	2.04	75000	31	3.09
3000	158	2.04	100000	27	.3.40
4000	137	2.04	-		

TYPE 61/2 K-100-WATT

Res. Ohms	Max. M.A.	List Price	Res.	Max. M.A.	List Pric
25	2000	52.15	3000	1.80	\$2.1
50	1414	2.15	5000	140	2.1
7.5	1155	2.15	7500	115	2.5
100	1100	2.15	10000	100	2.5
150	815	2.15	15000	80	2.5
250	632	2.15	20000	70	. 2.5
500	447	2.15	25000	63	2.5
750	365	2.15	30000	58	2.8
1000	315	2.15	40000	50	2.8
1250	280	2.15	50000	-14	2.8
1500	250	2.15	60000	41	3.2
2000	220	2.15	75000	36	3.2
2500	200	2.15	100.000	31	3.5

TYPE 81/2 K-160-WATT

Res. Ohms	Max. M.A.	List Price	Res. Ohms	Max. M.A.	List Price
- 5	5660	\$2.86	4500	185	\$2.86
10	4000	2.86	5000	180	2.86
25	2530	2.86	7500	145	2.86
50	1788	2.86	10000	125	2.80
75	1460	2.86	15000	105	3.45
100	1260	2.86	20000	90	3.4
200	900	2.86	25000	80	3.4
500	570	2.86	30000	67	3.45
1000	400	2.86	35000	57	3.45
1500	330	2.86	40000	5.0	3.4
2000	280	2.86	50000	40	3.43
2500	250	2.86	60000	33	3.9
3000	230	2.86	70000	28	3.90
3500	215	2.86	80000	25	3.9
4000	200	2.86	100000	20	3.90

TYPE 101/2 K-200-WATT

Res. Ohms	Max. M.A.	List Price	Res. Ohms	Max. M.A.	List Price
5	6310	\$3.58	4500	210	- \$3.5
10	4170	3.58	5000	200	3.5
25	2830	3.58	7500	165	3.5
50	2000	3.58	10000	140	3.5
75	1635	3.58	15000	115	4.2
100	1400	3.58	20000	100	4.2
250	900	3.58	25000	90	4.2
500	630	3.58	30000	82	4.2
1000	450	3.58	35000	71	4.2
1500	365	3.58	40000	62	4.2
2000	315	3.58	50000	50	4.2
2500	280	3.58	60000	42	4.2
3000	260	3.58	75000	33	4.29
3500	240	3.58	100000	25	4.29
4000	225	3.58			

Ohms 2.500 3.000 3.500 4.000 4,500 5,000 6.000 7,000 7,500 8.000

LECTROHM INSULATED WIRE-WOUND RESISTORS-1 WATT Max. Current Mills. 20 18 16 15 14 14 12 11 11



Ohms 9.000 10,000 12,500 15,000 16,000 17,500 18,000 20,000 22,500 25,000

COMPOSITION

RESISTORS

"CARBOMITE" M-TYPE RESISTORS

(Actual size as Illustrated)



M1/2-1/2 WATT

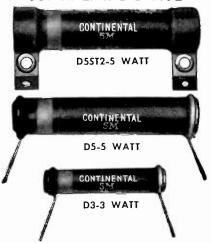
- Meet JAN-R-11 Army-Navy Specification
- Low Noise Level; Low Voltage Coefficient
- Stamped With Value
- Extra Small Size
- High Insulation 1000 volt Breakdown

Continental's New "CARBOMITE" bakelite insulated carbon composition resistors are now the standard of Electronic components used in the Radio and Electronic Industries. They meet all specifications of the joint Army-Navy-Jan-R-11 including the toughest of all tests the "Salt water immersion cycling." The "CARBOMITE" M type resistor consists of a solid molded carbon core, outer molded bakelite insulated shell and molded in leads. These resistors being well insulated can be mounted side by side or against any metal surface without shorting or grounding. They are recommended where space limits and insulating quality require a rugged reliable and small resistor capable of withstanding severe service. The lead wires are straight and are tinned with a tin composition heavy enough to give instant soldering with the touch of the heated soldering iron tip. The resistor values are easily identified by the bright non-rubbing off color code bands and the white ink stamped numbers of the value on the body of the resistor. The M2-2 watt, M1-1 watt and the $M\frac{1}{2}-\frac{1}{2}$ watt are

made in all the standard preferred RMA values as listed in the table below and are packed in quantities of 10 or 50 of each value to the box. Order in these quantities or multiples thereof.

Туре	Size	List Price	Tolerance
M 1/2 M 1	%" x %" Dia.	\$0.33 .50	\$0.17 .25
M2	9" x 37" Dia.	.66	.33

CONTINENTAL D-TYPE



"POCKET-PAC" RESISTOR KITS

- De Luxe Clear Plastic Boxes
 Color Code in Each Kit
- Strongly Hinged Covers
- Values Stamped on Each



These "Pocket-Pac" Kit-Boxes are made of clear durable plastic. The contents can be easily seen thru the walls of the box. A Color Code Indicator and the Box are furnished free with each Kit.

FORTY RESISTOR "POCKET-PAC" KIT VALUES

Ohms	Ohms	Ohms	Megohms	Megohma
100	1000	10,000	0.1	1.0
150	1500	15,000	.15	2.0
220	2200	22,000	.22	2.2
270	2700	27,000	.27	4.4
330	3300	33,000	.33	
470	4700	47,000	.47	4.7
560	5600	56,000	.56	4.1
680	6800	68,000	.68	
820	8200	82,000	.82	10.0
"Pocket-Pac" Code No. 40A 40B 40C 80D 80E	Quantity $40 ext{ M}^{1}/_{2}$ - $40 ext{ M}^{1}$ - $40 ext{ M}^{2}$ - $40 ext{ M}^{1}/_{2}$ $2 ext{ ea. } 40 ext{ v}$	and Type -½ watt - 1 watt - 2 watt plus 40 M1 alues M½	Box Size 4½ x 2¾ x 1 4½ x 2¾ x 1 7 x 3½ x 1 ² / ₃ 7 x 3½ x 1 ² / ₃ 7 x 3½ x 1 ² / ₃	List Price \$6.80 10.00 13.20 16.80 13.60
80 F	2 ea. 40 v	alues M1	7 $\times 3\frac{1}{2} \times 1\frac{3}{16}$	20.00

- Heavy Duty Carbon
- · Operate safely on overloads
- Non-inductive

The D-Type resistor with radial leads is made with solid molded carbon rods, copper sprayed on the ends to which are soldered No. 18 copper tinned leads. The soldered contact construction insures a noise-free and stable resistor. They are known as the heavy duty type units because of their size—having a larger radiating area they operate safely on overloads. A baked-on insulation is a protection against shorts to subpanel and wiring.

Туре	Wattage	Size	List Price Tolerance		
			±5%	±10%	
D 3	3 Watt	2" x ¾"	\$0.60	\$0.40	
D 4	4 Watt	21/2" x 1/2"	.75	.50	
D 5.	5 Watt	3" x 18"	.80	.60	
D 5ST2*	5 Watt	3" x 3"	1.25	1.00	

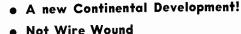
* D5ST2 units have heavy copper eyeletted and soldered strap terminals %'' wide with holes of 2%'' spacing. The outer holes can be used with either 6-32 screw mounting or solder wire loops, while the inner holes are for 8-32 screw mounting. The outer section of the terminal can be cut off or bent to any angle desired.

PRECISION

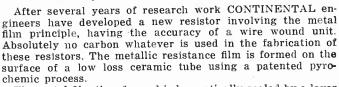


RESISTORS

"Nobleloy" X-Type Resistors



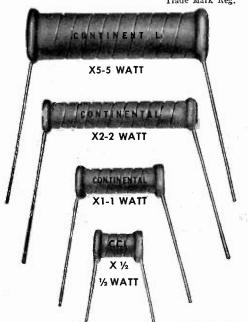
- Not carbon!
- Stability of Wire Wound and Equivalent



The metal film thus formed is hermetically sealed by a layer of vitreous enamel specially developed and patented by CONTINENTAL. The ceramic tube with its associated film is then spiralled to give a long resistance path and to accurately calibrate the unit to value.

Since the ceramic tubes are hollow they allow a larger surface for heat radiation, thus permitting the resistor to withstand overloads of 200% or better.

The copper-tinned lead terminals are soldered to extremely low resistance metal contact films which in turn are integral with the resistance film, thereby reducing contact resistance to a minimum. This type of construction produces a resistor unit having not only excellent resistance stability but also a negligible noise characteristic.



ELECTRICAL CHARACTERISTICS OF CONTINENTAL "NOBLELOY X" TYPE RESISTORS

Voltage

The recommended voltage rating of Continental "NOBLELOY X" type resistors is the maximum r.m.s. voltage which the resistor is expected to withstand in continuous use and is determined from the formula:

 $E = \sqrt{WR}$ Where E = rated D.C. or r.m.s. A.C. Voltage, W = watts rating, R = resistance.

In no case shall the D.C. or r.m.s. A.C. voltage be greater than the maximum voltage shown in the table.

Load Characteristics

Irrespective of value, Continental "NOBLELOY X" type resistors will not change more than 5.0% when the load is increased from 2% of rated wattage to 200% of rated wattage, and on cooling to room temperature returns to the original value. This is practically the temperature coefficient effect.

Voltage Characteristics

Voltage coefficient does not exceed $\frac{1}{10}$ of 1%.

Normal Load Life Characteristics (All Values)

The permanent change in resistance will not be more than 1.0% when the resistor is subjected to a normal life test of 1000 hours.

Overload Life Characteristics (All Values)

The permanent change in resistance will not be more than 2.0% when the resistor is subject to 200% of rated wattage for a period of 1000 hours.

Temperature Coefficient (All Values)

The temperature coefficient of resistance will not exceed 0.0005 (.05 per degree Centigrade) Negative.

Humidity Characteristics (All Values 1.0 Ohm to 15 Megohms)

Continental "NOBLELOY X" type resistors will not change more than 1.5% when conditioned in an atmosphere of 100% relative humidity at 40°C. ambient, for a period of 1000 hours.

Shelf Life

When stored under normal conditions, the resistance will not change more than 0.1% during a period of 2000 hours. This is a negligible change.

Noise Characteristic

When tested for noise according to standard R.M.A. procedure, the inherent noise level will not exceed ¼ microvolt per volt, irrespective of resistance value. This level is equal to wire wounds.

Finish

All "X" type resistors possess a smooth, uniform coating of a special rubberized enamel capable of resisting deterioration up to and including 400°F.

				Recommended	Max.	List 1	Prices
Type	Wattage	Size	Values	Voltage	Voltage	1%	5%
$X - \frac{1}{2}$	½ Watt	32" x 5/8"	1/2 ohm to 5 meghom	500	700	\$1.00	\$.85
X-1	1 Watt	32" x 1"	1 ohm to 10 meghom	700	1000	1.00	.85
X-2	2 Watt	32" x 184"	2 ohm to 20 meghom	1000	1500	1.20	1.05
X-5	5 Watt	½" x 2"	3 ohm to 30 meghom	1250	2000	1.40	1.25
No. 18	tinned copper leads 1	1/4" long.					

FILTERNOYS



FILTERNOYS

FILTERNOYS Paper Condensers





EE TYPE

CONTINENTAL Carbon Model E condensers are high quality, paper dielectric capacitors built in shapes and sizes equivalent to electrolytic capacitors commonly found in radio receivers. They are flash tested at 3 times their d.c. working voltage and have the advantage of low power factor at 60 cycles. They are noninductive, non-polarized, and are of permanent capacity. No active chemicals are used which could cause corrosion of the foil or leakage. The tabulations below show the actual capacity in microfarads and the rated sizes of electrolytic condensers occupying the same dimensions. Recommended for use on d.c. and rectified a.c. only. Model E, d.c. working volts, 600; peak volts,

Data and Prices on Type E Condensers

Cardboard Containers Furnished with Six-Inch Wire Leads

E-Type—600 Volts d.c.

Code	Capacity in Mfds.	Equivalent Electrolytic	Size	List Price
$\mathbf{EE2}$	1.2	2	4%x1%x 16	\$1.35
$\mathbf{EE4}$	2.4	4	43/8 x 13/8 x 15	1.65
EE8	4.8	8	4 % x1 % x1 1/8	2.00
			Metal Cans ng, Six-Inch Leads from Can	
IE4	2.4	4	4%x1% Dia.	\$2.00
IE8	4.8	8	4% x1½ Dia.	2.35

FILTERNOYS FO2GH Most Popular and Universal Plug-in Type FOR ELECTRIC RAZORS

SUPPRESSION TYPE

Handy plug-in type suppressor with two r-f chokes, two condensers, and a ground lead for use on electrical devices of 300 watts or less, creating interference of intermitten or temporary character, such as a sewing machine motor, small electric washing machines, electric shavers, drink mixers, cash registers, adding machines, or electric typewriters.
Size 25%" by 1%" diameter. 300-Watt capacity on 120



volts, a.c. or d.c.

Filternoys F02GH.....List Price \$2.00

FILTERNOYS GOSD, GOID

Designed to Be Mounted Directly on Small Electrical Devices





Filternoys G05D has two 0.5 Mfd. condensers, one connected to each lead the other ends grounded to the can at a common point. This Filternoys can be connected across each pair of brushes of generators, motors and the line wires of all stationary electric devices. Rating: 115-230 Volts a.c. or d.c.

G05D-Size 21/4 x1, List Price \$1.50

Filternoys Diverter G01D —Dual capacitors in a grounded container for any size electric motor operating on 120 v. or less. Through making use of the field coils as chokes, this is a most effective method to silence a noisy a.c. or d.c. motor. Size 1%" x 5%" diameter. Shock Proof. G01D....List Price \$0.75

Oil Burner Suppressor

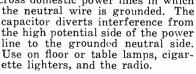
Filternoys Suppressor OB15, carbon element type, intended for use only with the high tension spark ignition of oil or gas burning heating systems. Must be connected in series with each line to the spark gap. Size of the suppressor 3½" x ¾" diameter. Universal connections at both ends for solderless contact.



OB15.....List Price \$1.80

FILTERNOYS F18

Filternoys Diverter F18 is a compact 0.1 mfd capacitor in a conveniently small bakelite plug-in coupler for use across domestic power lines in which



F18.....List Price \$0.75

SUPPRESSORS



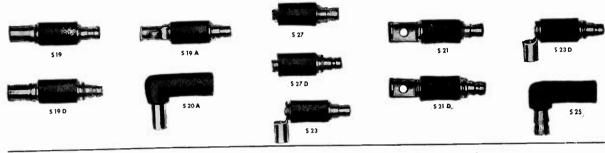
SUPPRESSORS

ALL SPARK PLUG SUPPRESSORS AND DISTRIBUTOR SUPPRESSORS EACH LIST PRICE \$0.30

CONTINENTAL SUPPRESSORS have been subjected to years of laboratory development and actual road service. They effectively remove noise interference from spark discharge at the plugs and hightension distributor-yet do not in any way affect the motor car ignition system.

They have mechanical strength to stand the most severe service. The resistance value of 10,000 ohms has been scientifically determined. Sparking across the terminals is eliminated by careful shaping of the electrodes and cases.

SPARK PLUG SUPPRESSORS



TYPE	SPARK PLUG CONNECTION
S-19	Vertical - Snaps on to spark plug.
S-19-A	Vertical — Rajah special terminal.
S-19-D	Vertical - Snaps on to spark plug
~ ~	same as S-19.
S-27	Vertical — Screws on.
S-27-D	Vertical Screws on.
S-21	"U" bracket type.
S-21-D	"U" bracket type.
S-23	Elbow — Flexible, snaps on.
S-23-D	Elbow Flexible, snaps on.
S-20-A	Elbow - Snaps on spark plug.
S-25	Elbow - Snaps on spark plug and also fits
D-20	distributor. A universal suppressor.

CABLE CONNECTION

Cable terminal snaps on.

Cable terminal snaps on and with a removable ferrule nut for spade terminal.

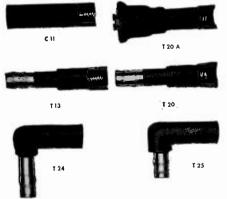
Cable terminal snaps on and with a removable ferrule nut for spade terminal. Cable terminal snaps on.

Cable terminal snaps on and with a removable ferrule nut for spade terminal.

Cable terminal snaps on. Cable terminal snaps on and with a removable ferrule nut for spade terminal.

Cable screws into suppressor, making a moisture proof insulated joint.

DISTRIBUTOR SUPPRESSORS



FORD DISTRIBUTOR **SUPPRESSOR**





Sleeve



GENERATOR CONDENSERS

T-17: Brush and Sleeve Supplied Together Distributor Type Brush Suppressor of the right resistance to suppress interference from the spark at the rotor. Universal Type: the brush can be inserted in the bakelite sleeve to fit models using the larger size brush.

GB05

ALL SPARK PLUG AND DISTRIBUTOR SUPPRESSORS EACH LIST PRICE \$0.30

Capacity

.5 mfd .5 mfd

G	B05 Generator and coil B05F Ford V-8 coil
TYPE	DISTRIBUTOR CONNECTION
C-11	
T-13	Vertical - Snaps in distributor well.
T-20	Vertical — Snaps in distributor well.
T'-20-A	Vertical — Snaps in distributor well and has a rubber skirt for moisture proof connection.
T-24	Elbow - Snaps in distributor well.
T-25	Elbow — Snaps in distributor well and fits both spark plug or distributor on Chevrolet and other makes.

Application

CABLE CONNECTION

The ignition cable can be cut at any point and the two ends screwed into the suppressor.

Size

21/8" x 3/4" 21/8" x 3/4"

Cable screws into suppressor. making a moisture proof insulated joint Cable with termina lclip snaps easily into suppressor. Cable with termina lclip snaps easily into suppressor.

Cable screws into suppressor. Cable screws into suppressor.

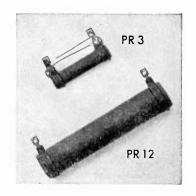
List Price

\$0.60 .75

VIRT WIRE WOUND FIXED RESISTORS

WIRE WOUND FIXED RESISTORS

To satisfy the most exacting needs of the Radio and Electronic Industries, Wirt Fixed Wire-wound Resistors are regularly furnished in PHENOCOTE protective coatings, developed and steadily improved over a period of many years in the Wirt Laboratories. The resistor wire is space wound on low loss ceramic tubes. The PHENOCOTE covering is an exclusive organic cement coating offering maximum protection to the resistance winding against the detrimental effects of moisture, humidity and electrolysis. Absolutely inert chemically, it will not effect the most delicate windings. It is par-



ticularly recommended for fine wire sizes and all applications where the maximum temperature of the unit will not exceed 300° F. These Resistors are universally used in the Radio, Electronic, Instrument, Public Address and Test Equipment fields.

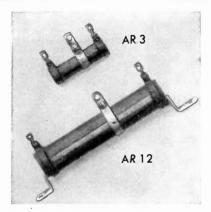
TABLE OF SPECIFICATIONS OF FIXED RESISTORS

Cat. No.	Watts	Sizes Phys.	Resistance Limits (Ohms)	List Price (Ea.)	Accessories Terminals	Mount- ing Brackets	Mount- ing Centers	Packing
PR 1	F	2/ // 1 //	14- 10000	00.50				
PR I	5	3/8"x1"	1 to 10000	\$0.53	Soldering Lugs & Wire Leads	None	******	10 to a box
PR 3	10	3/8"x13/4"	1 to 10000	.59	Soldering Lugs	None		10 to a box
, 0	20	78 11 1/4	11000 to 25000	.65	& Wire Leads	Hone		10 10 a 00x
PR 4	20	½"x2"	5 to 15000	.91	Soldering Lugs			
		/ -	16000 to 50000	1.11	& Wire Leads	None		10 to a box
			51000 to 100000	1.43				20 00 00 00 00
PR 12	50	3/4 " x 4"	5 to 5000	1.56				
			5100 to 25000	1.82	Soldering Lugs	2	5 "	Individual
			26000 to 100000	2.08				
PR 19	100	1 1/8 " x 6 1/2 "	5 to 5000	2.15				
			5100 to 25000	2.54				
			26000 to 50000	2.86	Soldering Lugs	2	7"	Individual
			51000 to 75000	3.25				
			76000 to 100000	3.58				
PR 22	160	11/8"x81/2"	5 to 10000	2.86				
			11000 to 50000	3.43	Soldering Lugs	2	9"	Individual
			51000 to 100000	3.86				
PR 23	200	$1\frac{1}{8}"x10\frac{1}{2}"$	5 to 10000	3.58	Soldering Lugs	2	11"	Individual
			11000 to 100000	4.29				

When ordering state: Quantity, Catalogue Number and Resistance Value.

WIRT

WIRE WOUND ADJUSTABLE RESISTORS



WIRE WOUND ADJUSTABLE RESISTORS

WIRT Adjustable Resistors are space wound on low loss ceramic tubes to which the resistance wire is bonded, resulting in dependability and long life. Protection of the windings is afforded by the PHENOCOTE covering which is described fully on the preceding page. One adjustable Slider Band, screw driver type, is furnished as standard. Bakelite knob type bands can be furnished on special order at slightly higher prices as shown below,

These bands are made with small contact buttons located on the inside of the band so that a number of taps may be made without shorting out excessive resistance.

TABLE OF SPECIFICATIONS OF ADJUSTABLE RESISTORS

		Sizes	Resistance	List	A	Accessorie	s	Mount-	
Cat. No.	Watts	Phys.	Limits (Ohms)	Price (Ea.)	Terminals	Brackets Mounting	Slider Bands	ing Centers	Packing
AR 3	10	%"x1¾"	1 to 10000	\$0.98	Soldering Lugs	None	1	*****	Individual
AR 7	25	3/4 " X 2 "	1 to 5000 6000 to 15000 20000 to 25000	1.24 1.43 1.56	Soldering Lugs	2	1	3"	Individual
AR 12	50	34"x4"	5 to 5000 7000 to 25000 30000 to 50000 60000 to 100000	1.95 2.15 2.47 2.86	Soldering Lugs	2	1	5"	Individual
AR 15	75	34 "x6"	10 to 5000 7500 to 25000 30000 to 50000 60000 to 100000	2.54 2.86 3.25 3.58	Soldering Lugs	2	1	7"	Individual
AR 19	100	1 1/8 "x 6 1/2 "	5 to 10000 15000 to 50000 75000 to 100000	2.86 3.25 3.90	Soldering Lugs	2	1	7"	Individual
AR 22	160	1 1/8" x S 1/2"	5 to 10000 15000 to 50000 60000 to 100000	3.25 4.15 4.65	Soldering Lugs	2	1	ġ"	Individual
AR 23	200	1½"x10½"	5 to 10000 15000 to 100000	4.29 5.01	Soldering Lugs	2	.1	11"	Individual

Extra Adjustable Slider Bands are obtainable and priced as follows:

 Wattage Size
 Screw Driver Type
 Bakelite Knob Type

 10, 25, 50, 75
 \$0.26
 List Price Each
 \$0.39

 100, 160, 200
 .33
 List Price Each
 .50

When ordering state: Quantity, Catalogue Number and Resistance Value.

MINIATURE RHEOSTATS and POTENTIOMETERS

MINIATURE RHEOSTATS AND POTENTIOMETERS

General: WIRT Metal Housed Rheostats and Potentiometers are rugged and compact affording high quality and dependability in operation. Due to size and construction these controls are moderately priced. Housings are made of tinplated steel. Highest quality resistance wire is space wound on specially treated laminated phenolic strips. The Phosphor Bronze contact-arm is grounded to the metal casing and all terminals are silver plated. Switches cannot be furnished. These Rheostats and Potentiometers are adaptable to a wide variety of uses in the Radio Instrument, Electronic and Test Equipment fields. The types available are listed below:

Cat. No. WC801-Two Terminal Rheostat, 2 Watt rating. Resistance Range: 5 ohms to 10,000 ohms with linear winding and standard tolerance of $\pm 15\%$. Diameter is $1\frac{1}{8}$ " and thickness $\frac{1}{2}$ ". Shaft is Cadmium plated steel, grounded to housing 5/32" from end of bushing and slotted for screw driver adjustment. Brass mounting bushings, 3/8"-32 x 1/4" long are standard. Each control is equipped

Cat. No. WC802-Three Terminal Potentiometer. 2 Watt rating. Resistance Range: 5 ohms to 10,000 ohms with linear winding and standard tolerance ±15%. All other specifications are the same as those listed under the WC801 control shown above. List Price \$1.25 Each

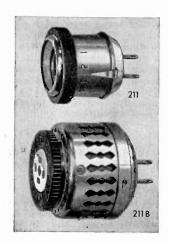
Cat. No. WC803-Sensitivity Control, 2 Watt rating. Resistance Range: 5 ohms to 12,000 ohms with linear winding and standard tolerance of $\pm 15\%$. Diameter is 11/8" and thickness is 1/2". A slot is provided in the Rotor mechanism allowing

Cat. No. WC804—Sensitivity Control, Identical with WC803 Control, except provided with an opening in back of control to permit screw driver adjustment from either front or back. List Price \$0.55 Each

Cat. No. WC807-Miniature Sensitivity Control, 1.5 Watt rating. Resistance Range: 5 ohms to 3000 ohms with uniform winding and standard tolerance of ±15%. A slot is provided in the Rotor mechanism allowing for screw driver adjustment from either front or back. List Price......\$0.50 Each

Cat. No. WCB507-Insulating Bushing for 3/8" Brass bushing and used with Cat. Nos. WC801 and WC802 Controls. List Price \$.095 Each

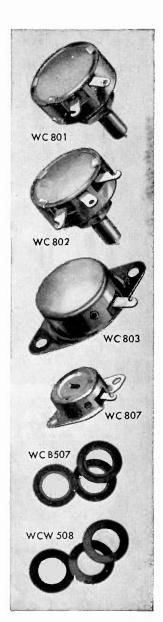
Cat. No. WCW508-Insulating Washer for 3/8" Brass bushing and used with Cat. Nos. WC801 and WC802 Controls. List Price \$0.075 Each



VARIABLE VOLTAGE REGULATOR

Cat. No. 211 - Variable Voltage Regulator is wound with high quality alloy wire on an insulated metal core with the winding encased in Di-El-Ite. It can be used as a Radio Voltage Regulator where the Receiver draws not more than 65 watts. For industrial use it can be wound up to 600 ohms maximum and will dissipate up to 8 watts. It is adjustable to 5 positions. List Price\$3.00 Each

Cat. No. 211-B-Regulator has air-cooling features which promote rapid heat dissipation. When used as a Radio Voltage Regulator the Receiver must not draw more than 150 watts. In industrial use for control of voltage and to regulate speed or heat it can be wound with a maximum resistance of 300 ohms and can dissipate up to 20 watts with maximum resistance setting. It is adjustable to 8 positions. List.....\$5.00 Each



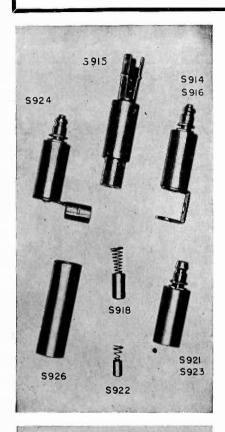
UTILITY CABINET

Cat. No. UC-Utility Cabinet is constructed of bass wood with corners dadoed and glued for strength; varnished and rubbed to give a beautiful finish. It has six drawers, each one having three removable partitions. The upper five drawers are 1" deep and the lower one is $1\frac{1}{2}$ " deep. Overall dimensions of the cabinet are 7" wide by $5\frac{1}{2}$ " deep by 9" high, Drawer guides, bottom and partitions are made of three ply laminated wood to prevent warping. Knobs are of wood and securely fastened, It is ideal for the storage of such parts as resistors, condensers, bolts, nuts, washers, small tools, etc. List\$8.00 Each



WIRT

SUPPRESSORS and SWITCHES



Wirt Suppressors are made with moulded black bakelite housings. All metal parts are made of rugged unfinished brass. Terminals are securely fastened to casings and sealed with special moisture

AUTO RADIO IGNITION SUPPRESSORS

All metal parts are made of rugged unfinished brass. Terminals are securely fastened to casings and sealed with special moisture and neat resisting dielectric cement. Resistor pills are sprayed with zinc and then double impregnated with a special moisture-proofing compound. Resistance value of all standard types is 10000 ohms $\pm 20\%$; for FV8 types 50000 ohms $\pm 20\%$. The distributed capacity is less than 1.5 mmf. Resistance values will not change more than 7% after being submerged in water for 100 hours. Test by sparking 1800 times per minute at 10,000 volts for 100 hours produces resistance change of not more than 3%. Wirt Suppressors are impervious to heat, oil, moisture and mild acids, and will not change in resistance more than 10% in 50,000 miles of operation.

Cat. No.	Туре	List	Price
\$914—Bracke	t—Standard	\$0.30	Each
\$916—Bracke	et—For FV-8	.30	Each
\$915-Distrib	outor—Slip Fi	itting	Each
		1933-34-35	
\$922-FV-8 F	3rush—Years	1936 to 1940	Each
\$921—Univer	sal Screw—S	Standard	Each
\$923—Univer	sal Screw-F	For FV-8	Each
\$924—Snap-o	n Plug	.30	Each
		ng	

SW 711 Gr

WIRT ROTARY AND SLIDE SWITCHES

Rotary Switches

General: Wirt Rotary Switches are of the quick break type, have positive contact, are rugged and neat in appearance. They are constructed with tin plated steel housings. The outside diameter of the switch is 1½" and thickness ½". Standard bushings are of brass, ¾"-32 x ¾" long. Steel shafts are ½" from end of bushing, and made with a flat. Wiping contacts and terminals are silver plated. Terminals are securely fastened in place. Activating spring is positive in action. One 9/16" hex. nut is furnished. These switches are successfully used in conjunction with Radio, Phonograph, Signal and Instrument Circuits.

		_				
Cat. No.	Type				List	Price
sw711 —SPST	Rotary Sv	witch,	3A-125V-AC-DC	2 Terminals	\$0.90	Each
SW711A-SPDT	Rotary Sy	witch.	3A-125V-AC-DC	3 Terminals	1.00	Each

Slide Switches

General: All Wirt Slide Switches are compact and sturdy. Housings are made of steel and are cadmium plated. The physical dimensions of the switches have been standardized, width 35/64", length 1-13/32" and mounting centers 11%". Standard buttons are of black bakelite. All contacts and terminals are silver plated. Switches SW723 and SW725 are supplied with a dot which indicates the "On" position. These switches are used in the Radio, Signal, Phonograph and Instrument industries.

	are used in th	e Rad	io, Signa	n, Phonograph	anu	mstrument	muus	ti ica.
	Cat. No.	Т	уре				List	Price
	SW723—SPST							
	SW724—SPDT	Slide	Switch,	.75A-125V-AC-I	OC, 3	Terminals	.37	Each
	SW725—DPST						.44	Each
	SW726—DPDT							Each
_			_					

SW 723

MALLORY CONTROLS . LIST PRICES

* Complete descriptions of these parts will be found on the following pages.

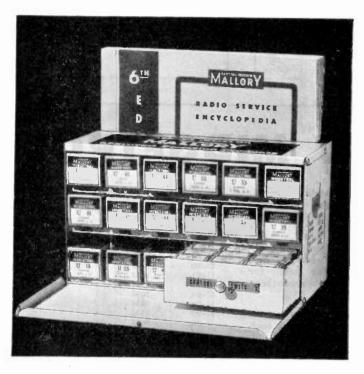
US23 US26 US26T US27 US28	.60 .75 .75 .75	MRT450 1.85 MRT451 1.85 MRT454 1.85 MRT460 1.85	UM163 1.25 UM165 1.25 UM180 1.25 UM180 1.25 UM181 1.25	\$18 .30 \$19 .65 \$221 .45 \$222 .30 \$222 .30 \$224 .30 \$224 .30 \$224 .30 \$225 .30 \$226 .30 \$226 .30 \$226 .30 \$226 .30 \$227 .30 \$229 .30 \$229 .30 \$232 .30 \$233 .30	Mallory Page 10 1½" Dia. • Fixed Shaft • Special	UC500 1.25 A400P 1.25 A550P 1.25 A1MP 1.25 A2MP 1.25 A3MP 1.25 A4MP 1.25 A5MP 1.25 A5MP 1.25 A10MP 1.25 A10MP 1.25
Attachable Midgetrol St	witches \$0.75	MRT486 1.85 MRT448 1.85 MRT443 1.85 MRT445 1.85 MRT446 1.85 MRT446 1.85 MRT447 1.85 MRT448 1.85 MRT449 1.85 MRT450 1.85 MRT450 1.85 MRT451 1.85	UM151 1.25 UM154 1.25 UM156 1.25 UM157 1.25 UM159 1.25 UM159 1.25 UM160 1.25 UM161 1.25 UM162 1.25 UM162 1.25 UM163 1.25 UM165 1.25 UM165 1.25 UM168 1.25 UM180 1.25	\$\$4 .30 \$\$5 .30 \$\$5 .30 \$\$11 .45 \$\$112 .30 \$\$114 .45 \$\$14 .45 \$\$16 .30 \$\$16 .30 \$\$17 .65 \$\$18 .30 \$\$19 .65	TRP618 1.85 TRP619 1.85 TRP620 1.85 TRP621 1.85 TRP621 1.85 TRP622 1.85 TRP624 1.85	Q 1.25 R 1.25 S 1.25 T 1.25 U 1.25 V 1.25 W 1.25 X 1.25
UT420 UT425 UT427 UT429 UT431 UT443 UT448 UT450 UT451 UT454	1.85 1.85 1.85 1.85 1.85 1.85 1.85 1.85	MRT420 \$1.85 MRT425 1.85 MRT426 1.85 MRT427 1.85 MRT428 1.85 MRT430 1.85 MRT431 1.85	UM134 1.25 UM137 1.25 UM137 1.25 UM138 1.25 UM140 1.25 UM141 1.25 UM142 1.25 UM143 1.25 UM144 1.25 UM147 1.25 UM147 1.25 UM149 1.25 UM150 1.25	with Types UM, TM, and DTM Controls SS1 \$0.30 SS2 .30 SS3 .45	TRP605 1.85 TRP606 1.85 TRP607 1.85 TRP609 1.85 TRP610 1.85 TRP612 1.85 TRP613 1.85 TRP614 1.85 TRP616 1.85 TRP616 1.85 TRP616 1.85 TRP616 1.85 TRP616 1.85 TRP617 1.85 TRP618 1.85 TRP619 1.85 TRP619 1.85 TRP620 1.85 TRP621 1.85 TRP621 1.85	D12 1.25 D7 1.25 D12 1.25 E 1.25 E7 1.25 F7 1.25 F7 1.25 G7 1.25 G7 1.25 H7 1.25
U29 U33 U34 U35 U36 U39 U41 U42 U44 U45 U46 U46 U45 U51 U54 U55 U57 U65	\$1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25	MK400 \$1.25 MK401 1.25 MK402 1.25 MK403 1.25 MK403 1.25 MK403 1.25	UM114 \$1.25 UM118 1.25 UM119 1.25 UM120 1.25 UM121 1.25 UM122 1.25 UM124 1.25 UM128 1.25 UM129 1.25 UM129 1.25 UM129 1.25 UM133 1.25 UM134 1.25	DTM282 \$1.85 DTM283 1.85 DTM287 1.85 DTM289 1.85 DTM291 1.85 DTM293 1.85 DTM296 1.85 DTM296 1.85 DTM298 1.85 DTM298 1.85 UTM298 1.85 DTM298 1.85	1½" Dia. • Fixed Shaft • Single & Double Tapped Controls TRP601 \$1.85 TRP602 1.85 TRP603 1.85 TRP604 1.85 TRP605 1.85	1½" Dia. • Fixed Shaft • Wire-Wound Controls A \$1.25 B 1.25 C 1.25 C 1.25 D7 1.25 D12 1.25
U41 U42 U43 U44	1.25 1.25 1.25 1.25 1.25	1½″ Dia. • Fixed Knurled Shaft	11/8" Dia. • Plug-In Shaft Controls	DTM282 \$1.85 DTM283 1.85 DTM287 1.85 DTM289 1.85	1250MP 1.25	Mallory Page 11
U21 U22 U24 U28 U29 U33 U34 U35 U36 U39	1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25	MR40 1.25 MR41 1.25 MR42 1.25 MR44 1.25 MR48 1.25 MR50 1.25 MR51 1.25 MR53 1.25 MR55 1.25 MR57 1.25	SMD500 \$3.75 SMD501 3.75 SMD502 3.75 SMD503 3.75 SMD504 3.75 SMD506 3.75 SMD507 3.75 SMD508 3.75 SMD509 3.75 SMD509 3.75 SMD510 3.75 SMD511 3.75 SMD512 3.75	1/8" Dia. • Plug-In Shaft • Double Tapped Controls	UC510 1.25 UC511 1.25 UC514 1.25	DRP114 \$3.10 DRP116 3.10 DRP116 3.10 DRP117 3.10 DRP119 3.10 DRP1122 3.10 DRP122 3.10 DRP221 3.10 DRP221 3.10 DRP224 3.10 DRP224 3.10 DRP244 3.10 DRP250 3.10 DRP250 3.10 DRP304 3.10 DRP304 3.10 DRP304 3.10 DRP304 3.10 DRP308 3.75 DRP311 3.10 DRP318 3.10
U12 U14 U18 U19		MR34 1.25 MR35 1.25 MR36 1.25 MR37 1.25 MR39 1.25	Application • Dual Controls SMD500 \$3.75 SMD501 3.75 SMD503 3.75 SMD503 3.75 SMD504 3.75	TM241 1.85 TM242 1.85 TM243 1.85 TM244 1.85 TM246 1.85 TM246 1.85 TM247 1.85 TM247 1.85 TM248 1.85 TM250 1.85 TM250 1.85 TM251 1.85 TM252 1.85 TM252 1.85 TM257 1.85 TM259 1.85 TM259 1.85	Z 1.25 Z12 1.25 UC501 1.25 UC502 1.25 UC503 1.25 UC504 1.25 UC506 1.25 UC506 1.25 UC507 1.25 UC508 1.25 UC509 1.25 UC509 1.25 UC509 1.25	DRP114 \$3.10 DRP115 3.10 DRP116 3.10 DRP117 3.10 DRP119 3.10 DRP122 3.10 DRP169 3.10
Mallory The Mallor	<i>Page 4</i> ———ry Midgetrol		i ougus obcoldi	TM244 1.85	F12 \$1.25 H12 1.25 J 1.25 K 1.25 K12 1.25 M 1.25 Y 1.25 Z 1.25 Z12 1.25	Special Dual Controls
Mallory Co U1485 R1485 M1485	\$24.75 24.75 24.75 24.75	Shaft Controls	SM309 \$2.50 SM310 1.85 SM311 2.50 SM312 2.50 SM313 2.50 SM316 1.85 SM317 2.50	TM231 \$1.85 TM232 1.85 TM233 1.85 TM234 1.85 TM236 1.85 TM238 1.85 TM239 1.85 TM240 1.85 TM240 1.85	1½" Dia. • Fixed Shaft • Carbon Controls	SRP282 \$1.85 SRP286 1.85 SRP289 1.85 SRP290 1.85 SRP900 1.85 SRP901 1.85 SRP960 1.85 SRP960 1.85
Mallor	y Page 3	Mallory Page 8	-	Cat. No. Price Mallory Page 7		_

MALLORY CONTROLS AND RESISTORS . LIST PRICES

★ Complete descriptions of these parts will be found on the following pages.

Mallory List Cat. No. Price	Mallory List Cat. No. Price	Mallory List Cat. No. Price	Mallory List Cat. No. Price	Mallory List Cat. No. Price	Mallory List Cat. No. Price
Mallory Page 11	Mallory Page 13	Mallory Page 14	Mallory Page 16	Mallory Page 17	Mallory Page 18
Attachable Switches 1½" Dia. Controls	4 Watt • Wire-Wound Potentiometers and Rheostats	Adjustable Mounting Brackets	10 Watt • Fixed Vitreous Enamel Resistors	10HJ7500 to 10HJ10000 \$2.34 10HJ15000 to 10HJ20000 2.40	5AV7500 to 5AV10000 \$2,25 5AV12000 to 5AV20000 2.41
6-9 \$0.60 6T .75 7 .75 8 .75	M1P \$1.25 M3P 1.25 M6P 1.25	RB248 \$0.25 RB249 .25	1HJ1 to 1HJ1000 \$0.58 1HJ1100 to	10HJ25000 to 10HJ40000 2.76 10HJ50000 2.90	5AV25000 to 5AV40000 2.61 5AV50000 2.81
13 .75 14 .75	M10P 1.25 M15P 1.25 M20P 1.25 M25P 1.25 M30P 1.25 M40P 1.25	Hexagon Shoulder Nuts	1HJ6000 to 1HJ10000 .72	10HJ75000 3.09 10HJ100000 3.26	80 Watt • Adjustable Vitreous Enamel
Mallory Page 12 1 Watt • Carbon •	M50P 1.25 M60P 1.25 M75P 1.25 M100P 1.25	255 \$0.20 A11260-12 .25 A11260-2 .30	1HJ11000 to 1HJ20000 .80 1HJ22500 to 1HJ50000 .86	200 Watt • Fixed Vitreous Enamel	8AV10 to 8AV1000 \$2.34
Potentiometers B5MP \$1.25 B10MP 1.25	M200P 1.25 M400P 1.25 M500P 1.25 M600P 1.25 M1MP 1.40 M2MP 1.40	Mallory Page 15	20 Watt - Fixed	Resistors 20HJ25 to 20HJ1000 \$2.79	8AV1500 to 8AV5000 2.42 8AV7500 to 8AV10000 2.56
B25MP 1.25 B50MP 1.25 B100MP 1.25 B250MP 1.25	M2MF 1.40 M3MP 1.40 M4MP 1.40 M5MP 1.40 M10MP 1.65 M15MP 1.65	Universal Extension Shafts	Vitreous Enamel Resistors	20HJ1500 to 20HJ5000 2.84 20HJ7500 to 20HJ10000 3.04	8AV15000 to 8AV20000 2.71 8AV25000 to 8AV40000 2.98
B500MP 1.25 B1000MP 1.25	M20MP 1.65 M25MP 1.65 M50MP 1.95 M70MP 1.95	RS242 \$0.40 RS243 .40 RS244 .40 RS245 .45	2HJ5 to 2HJ1000 \$0.75 2HJ1250 to 2HJ5000 .78	20HJ20000 3.22 20HJ30000 to 20HJ40000 3.34	8AV50000 to 8AV60000 3.06 8AV75000 to 8AV80000 3.34
T & L Pads Attenuators	M05R 1.00 M1R 1.00 M2R 1.00 M3R 1.00 M4R 1.00	RS246 .45	2HJ6000 to 2HJ10000 .88 2HJ12500 to	20HJ50000 3.45 20HJ75000 3.63 20HJ100000 3.84	8AV100000 3.68
T6 \$4.25 T8 4.25 T15 4.25 T50 4.25	M6R 1.00 M10R 1.00 M15R 1.00 M20R 1.00	Web Removing Tool 201 \$0.25	2HJ25000 .94 2HJ25000 to 2HJ40000 1.08	10 Watt • Adjustable	100 Watt • Adjustable Vitreous Enamel Resistors
T200 4.25 T250 4.25 T500 4.25 T2000 4.25	M30R 1.00 M40R 1.00 M50R 1.00 M60R 1.00		2HJ50000 1.25 2HJ75000 to 2HJ100000 1.43	Vitreous Enamel Resistors	10AV50 to 10AV1000 \$3.06
L6 3.75 L8 3.75 L15 3.75	M75R 1.00 M100R 1.00	Universal Flexible Coupling Shafts	50 Watt • Fixed	1AV1 to 1AV1000 \$1.21 1AV1250 to	10AV2000 to 10AV5000 3.14 10AV7500 to 10AV10000 3.31
L50 3.75 L200 3.75 L250 3.75 L500 3.75	7 Watt • Wire-Wound Potentiometers	FS250 \$0.75 FS251 .75 FS252 .75 FS253 .75	Vitreous Enamel Resistors 5HJ10 to	1AV5000 1.28 1AV6000 to 1AV10000 1.36	10AV15000 to 10AV20000 3.51 10AV25000 to 10AV40000 3.73
1.2000 3.75 2 Watt • Wire-Wound	E5MP \$3.00 E10MP 3.00 E20MP 3.00 E25MP 3.25	Dial Plates for	5HJ1000 \$1.43 5HJ1500 to 5HJ5000 1.51	25 Watt • Adjustable Vitreous Enamel	10AV50000 3.87 10AV75000 4.06
• Potentiometers C6P \$1.25	E50MP 3.25 E75MP 3.25 E100MP 3.25 E125MP 3.25 E150MP 3.25	Controls, Rheostats, Potentiometers	5HJ7500 to 5HJ10000 1.64 5HJ12500 to 5HJ20000 1.81	Resistors 2AV1 to 2AV1000 \$1.59	200 Watt • Adjustable Vitreous Enamel Resistors
C10P 1.25 C15P 1.25 C20P 1.25 C30P 1.25	Mallory Page 14	369 \$0.25 391 .15 393 .25 395 .25 396 .25 397 .25 398 .25 399 .25	5HJ25000 to 5HJ40000 2.01 5HJ50000 2.20	2AV1250 to 2AV5000 1.61 2AV6000 to 2AV10000 1.73	20AV50 to 20AV1000 \$3.73
C40P 1.25 C50P 1.25 C100P 1.25 C200P 1.25 C400P 1.25	Shafts • Couplers • Bushings	397 .25 398 .25 399 .25	5HJ75000 2.51 5HJ100000 2.71	2AV10000 1.73 2AV12000 to 2AV20000 1.78 2AV25000 1.92	20AV1500 to 20AV5000 3.79 20AV10000 4.01 20AV20000 4.21
C1MP 1.40 C3MP 1.40 C5MP 1.65 C6MP 1.65	EC240 \$0.30 EC256 .30 EC257 .30 EB247 .25	Mallory Page 16	Mallory Page 17	Mallory Page 18	20AV25000 to 20AV30000 4.29 20AV50000 4.39 20AV75000 4.62
C10MP 1.65 C15MP 1.65 C6R 1.00 C10R 1.00	UB241 .95 for 10	5-Watt • Fixed Vitreous Enamel Resistors	100 Watt • Fixed Vitreous Enamel Resistors	50 Watt • Adjustable Vitreous Enamel Resistors	Extra Adjustable Clip
C15R 1.00 C20R 1.00 C30R 1.00 C40R 1.00	Wrench for Volume Control Nuts	HHJ1 to HHJ1000 \$0.53	10HJ25 to 10HJ1000 \$2.12	5AV5 to 5AV1000 \$2.06	No. 1V \$0.37 No. 3V .37
C50R 1.00 C100R 1.00	178 \$0,25	HHJ1100 to HHJ5000 .58	10HJ1500 to 10HJ5000 2.17	5AV1500 to 5AV5000 2.11	No. 6V .47

MALLORY CONTROL DEALS



FAST-MOVING SELECTIONS OF MALLORY MIDGETROLS AND MALLORY 11/8" CONTROLS

MALLORY MIDGETROL SELECTION

(Order by Catalog Number U-1485)

4 U-48	1 U-55	2 UP-10
3 U-53	1 U-39	5 Extra
2 U-50	1 U-41	Spring Clips
2 U-44	9 US-26	5 Extra U Clips
1 U-18	4 UE-50	1 Web Remov-

You Get This Cabinet at no Extra Cost When You Purchase the Controls and Switches at Your Regular Discount

 Treat yourself to a neat, heavy-duty stock cabinet, and simplify your inventory at the same time, with a Mallory Control Deal! Here's how:

You buy a carefully selected assortment of 15 fast-moving controls and 9 popular AC switches all at your regular price. Then, you get the handsome steel cabinet shown above at no extra cost to you! This cabinet contains 15 compartments for your controls, and a roomy drawer to hold your switches, extension shafts, idler pulleys and other accessories. A special built-in rack holds your Mallory Radio Service Encyclopedia which is purchased separately. And a hinged lid snaps shut to hold the controls in place during service calls.

When you use a Mallory Control Deal you get maximum coverage with minimum stock. In more than 9 out of 10 service jobs you will have on hand the control you need. And you can see at a glance which controls you immediately need to re-order.

Best of all—the revolutionary new Mallory Midgetrol is now available in a Mallory Control Deal. And a Mallory Midgetrol improves performance in any set where a 11/8" control was originally used. With your Mallory Midgetrol Deal you get, in addition to the cabinet, extra spring clips, extra U-clips, extra idler pulleys and extra extension shafts. Get started today with the Mallory Midgetrol. Order your deal today!

MALLORY MR SELECTION

(Order by Catalog Number R-1485)

4 MR-48	1 MR-18	5 M-26
3 MR-53	1 MR-55	3 M-27
2 MR-50	1 MR-39	1 M-28
2 MR-44	1 MR-41	

MALLORY UM SELECTION

(Order by Catalog Number M-1485)

4 UM-154	1 UM-118	2 M-27
3 UM-161	1 UM-163	1 M-28
2 UM-147	1 UM-142	5 SS-25
2 UM-156	3 M-26	1 SS-14
1 UM-140		

You will use your MALLORY CONTROL DEALS

for all of these Radio Sets

Admiral Air King Airline Allied Atwater Kent Belmont Brunswick-Mersman

Cadillac

Capehart Chevrolet Colonial Continental Crosley Delco Detrola

Dewald

Emerson Fada Fairbanks-Morse Hallicrafter Motorola Patterson

R.C.A. Scott Sentinel Sonora Spiegel Stewart-Warner

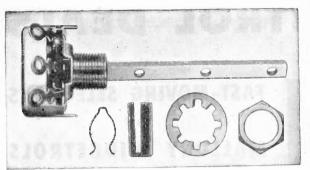
Sears-Roebuck

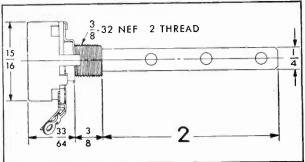
Trav-ler Truetone United American Bosch Warwick

Westinghouse Wilcox-Gay Zenith Stromberg-Carlson Zephyr

Philco

Pilot





Catalog

Number

U-12

11.14

U-18

U-19

U-20

11-21

Ŭ-22

U-24

U-28

U-29

U-33

U-34

U-35

U-36

11.39

U-40

U-41 Ū-42

U-43

11-44

U-45

U-46

U-48

II-50

U-51

U-53

U-54

U-55

U-56

U-57 U-65

UT-420

UT-425

UT-427

UT-429

UT-431

UT-443

UT-450

UT-448

UT-454

UT-451

Resistance

5 M

5M

10M

10M

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20M

25M

25M

50M

50M

50M

75M

100M

100M 100M

150M

200M

250M

250M

250M

500 M

500M

750M

1 Meg.

1 Meg.

2 Meg. 2 Meg.

3 Meg.

5 Meg.

250M

350M

500M

500M

500M

1 Meg. 2 Meg.

2 Meg.

2 Meg.

2 Meg.

Taper'

2

4

2

1 2

4 1

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4

1

2

4

1

2

4

1

1

50M

70M

100M

50 M 225M

450M

125M

250M 400M

900 M

Tap At

ALLORY MIDGETROL

APPLICATION: For volume and tone control in audio circuits. Tapped controls provide tone compensation when required. Special controls are for use as recommended in the Mallory Radio Service Encyclopedia.

DESCRIPTION: A very small diameter control (15/16) to service radio sets requiring small parts. Available in full line of resistances, tapers, and taps. Special resistance element gives ample safety factor for current-carrying ability. New type contact makes control smoothest and quietest on market by laboratory tests.

SHAFT DESCRIPTION: New Type flat shaft easily cut to any required length with a pair of side snips. Clips furnished with each control permits its use with all three knob types-Set Screw, Push-On, and Knurled.

ACCESSORIES: One hex nut, one lock washer, one U-clip and one spring steel clip furnished with each control. Idler pulleys, extension shafts and AC switches are available when needed as listed hereon.

PACKAGING: One control plus accessories and complete instructions in each display carton.

Attachable Mallory Midgetrol Switches



Entirely designed and manufactured by Mallory especially for use with Mallory Midgetrols. Can easily and quickly

be attached without disassembling control.

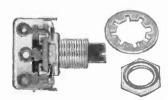
Catalog Number	Description
US-26	Single pole-single throw
US-26T	Single pole—single throw Has dummy terminal
US-27	Double pole-single throw
US-28	Single pole-double throw
US-23	Four pole single throw, shorting

Accessories

UE-50 Shaft-Extends shaft length on each Mallory Midgetrol an additional 4" with each extension. Two self-tapping screws furnished with each extension.

UP-10 Pulley-Fits over the Mallory Midgetrol flat shaft to permit its use as an idler for the dial cord where necessarv.

MALLORY MIDGETROLS FOR SPECIAL APPLICATIONS



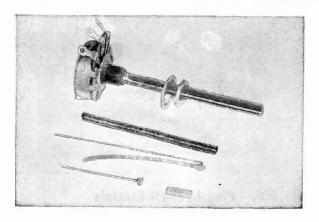
 Special Mallory Midgetrols for use as exact replacements. These Midgetrols meet exact physical and electrical requirements for special applications. Except for the shaft, these Midgetrols are of the same basic construction as the standard Midgetrol. A fixed, knurled, and slotted bakelite shaft protrudes 1/4" beyond the bushing. The AC switches listed above will fit these Midgetrols.

aper*
4
4
4
4

*See taper chart on page 8.

Mallory Page 4 (See Mallory Page 1 for List Prices)

MALLORY CARBON CONTROLS



11/8" Dia. · Fixed Shaft Controls

APPLICATION—For volume or tone control in audio circuits.

DESCRIPTION—1 1/8" carbon control, available in a wide range of resistances and tapers. Has an excellent safety factor in current-carrying capacity. Uses Mallory's special resistance element insuring a long, quiet life.

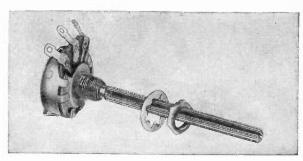
SHAFT DFSCRIPTION—An accurately finished channel shaft is permanently attached; measures 3" from lock ring.

ACCESSORIES—One hex nut, one lock washer, and one shim is furnished with each control. An external adjustable resistor is furnished where required, as indicated below. AC switches are available as a special item. (See page 8).

PACKAGING—One control, plus accessories and complete instructions per display carton.

Catalog Number	Ohms Resistance	Taper	Catalog Number	Ohms Resistance	Taper
MR14 §	5 M	4	MR39	100M	1
MR18 §	10M	1			-
MR19 §	10M	2	MR40	100M	2
MR20 §	10M	4	MR41	100M	4
MR21 §	15M	1	MR42	150M	1
MR22 §	15M	2	MR44	250M	1
MR24 §	20M	ī	MR45	250M	2
MR28 §	25M	2	MR48	500M	í
MR29 8	25M	4	MR50	500M	4
MR33	50M	í	MR51	750M	1
MR34 §	50M	2	MR53	1 Meg.	1
MR35	50M	4	MR55	2 Meg.	1
MR36	75M	i	MR57	3 Meg.	1
MR37	75M	2	111101	o Meg.	1

§External adjustable resistor included



11/8" Dia. · Fixed Knurled Shaft Controls

APPLICATION—For volume or tone control in audio circuits.

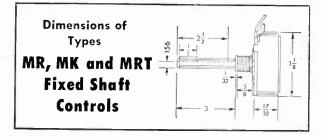
DESCRIPTION—11/8" carbon control using same element as type MR.

SHAFT DESCRIPTION—Furnished with a 3" accurately finished, permanently attached knurled shaft for use in replacing original controls of this shaft construction.

ACCESSORIES—One hex nut and one lock washer furnished with each control. AC switches available as a special item. (See page 8).

PACKAGING—One control, plus accessories and complete instructions per display carton.

Catalog Number	Ohms Resistance	Taper
MK400 MK401 MK402 MK403	250M 500M 1 Meg. 2 Meg.	1 1 1



$1\frac{1}{8}$ " Dia. · Fixed Shaft · Single Tapped Controls

APPLICATION—For control of volume with tone compensation in audio circuits.

DESCRIPTION—11/8" carbon controls with a single tap. Available in a wide range of resistances. Taps are accurately located. Uses Mallory's special resistance element insuring quiet, long life and an excellent safety factor in current-carrying capacity.

SHAFT DESCRIPTION—An accurately finished channel shaft is permanently attached; measures 3" from lock ring.

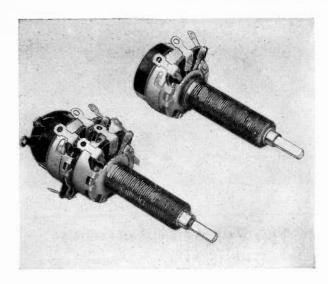
ACCESSORIES—One hex nut, one lock washer and one shim furnished with each control. AC switches available as a special item. (See page 8.)

PACKAGING—One control, plus accessories and complete instructions per display carton.

Catalog Number	Overall Resistance	Tap Resistance	Catalog Number	Overall Resistance	Tap Resistance
MRT420 MRT425	250M 350M	50M 70M	MRT460	1 Meg.	500M
MRT428	500M	5M	MRT445	2 Meg.	5M
MRT426	500M	15M	MRT446	2 Meg.	15M
MRT427	500M	100M	MRT447	2 Meg.	60M
MRT430	500M	150M	MRT450	2 Meg.	125M
MRT431	500M	225M	MRT448	2 Meg.	250M
MRT436	1 Meg.	125M	MRT454	2 Meg.	400M
MRT440	1 Meg.	200M	MRT449	2 Meg.	600M
MRT438	1 Meg.	300M	MRT451	2 Meg.	900M
MRT443	1 Meg.	450M		0.	

Mallory Page 5 (See Mallory Page 1 for List Prices)

MALLORY CARBON CONTROLS



11/8" Dia. • Fixed Shaft • Special Application · Single & Dual Controls

APPLICATION-Special single and dual controls to be used as recommended in the Mallory Radio Service Encyclopedia.

DESCRIPTION-Type SM are single and type SMD are dual 11/8" diameter carbon controls. Both types are made in a wide range of resistances and tapers and with taps for special applications. The controls and their shafts are designed to exactly replace the original equipment control. Switches are provided as indicated.

SHAFT DESCRIPTION-Type SM have fixed shafts while type SMD have fixed concentric shafts. Each shaft varies according to the requirements of the control and its recommended application.

ACCESSORIES-One hex nut and one lock washer furnished with each control.

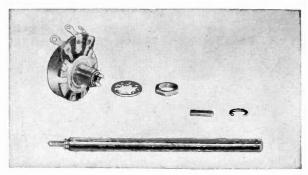
PACKAGING-One control, plus accessories and complete instructions per display carton.

Catalog	Ohms	
Number	Resistance	Tap at
SM300†	350M	75M
SM301†	2 Meg.	500M
SM302†	500M	No Tap
SM303*	6Meg.	No Tap
SM304†	1 Meg.	200M
SM305†	1 Meg.	875M
SM306†	1 Meg.	550M
SM307*	2 Meg.	250 M
SM308	1 Meg.	200M
SM309†	2 Meg.	600M
SM310	2 Meg.	125M
SM311†	1 Meg.	300M
SM312†	250 M	No Tap
SM313†	25 0M	No Tap
SM316	350M	35M
SM317†	2.25 Meg,	500M & 1 Meg.

Catalog Number	Res. Front	Res. Rear	Tap At
SMD500†	2 Meg.	2 Meg.	No Тар
SMD501†	2 Meg.	1 Meg.	Front 500M
SMD502†	250M	1 Meg.	Rear 250M
SMD503†	2 Meg.	1 Meg.	Front 500M
SMD504†	250M	500M	Front 50M
SMD505†	250M	1 Meg.	Rear 300M
SMD506†	500M	1 Meg.	Rear 200M
SMD507†	500M	350M	Rear 70M
SMD508†	30M	1 Meg.	Rear 450M
SMD509†	2 Meg.	500M	Front 900M
SMD510†	1 Meg.	500M	Front 300M
SMD511†	1 Meg.	350M	Rear 70M
SMD512†	1 Meg.	350M	Rear 70M

†Includes SPST switch permanently attached to control.

AC Switch available as special item. (See page 8).



11/8" Dia. · Plug-In Shaft Controls

APPLICATION—For volume or tone control in audio

DESCRIPTION-1 1/8" carbon control, available in a wide range of resistances and tapers. Has an excellent safety factor in current-carrying capacity accomplished by the use of Mallory's special resistance element, which also insures a long, quiet life.

SHAFT DESCRIPTION—The control is provided with a socket which will take 30 different types of shafts insuring maximum flexibility of stock. One SS-1 4" channel shaft furnished with each UM control. (See page 8 for other universal and special plug-in shafts available.)

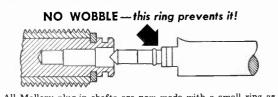
ACCESSORIES—One hex nut, one lock washer, one shim, one lock ring, and one SS-1 shaft furnished with each control. An external variable resistance is furnished where required, as indicated below. AC switches available as a special item. (See page 8.)

PACKAGING-One control, plus accessories and complete instructions per display carton.

Catalog Number	Ohms Resistance	Taper	Catalog Number	Ohms Resistance	Taper
UM1148	5M	4	UM144	150M	1
UM118 §	10M	1	/UM147	250M	1
UM119 §	10M	2	UM150*		
UM120 §	10M	4	,		
UM121 §	15M	1	UM149	250M	4
UM122 §	15M	2	UM151	350M	1
UM124 §	20M	1	∫UM154	500M	1
UM128 §	25M	2	\UM157*		
UM129 §	25M	4			
UM133	50M	1	UM156	500M	4
UM134 §	50M	2	UM158	750M	1
UM135	50M	4	∫UM161	1 Meg.	1
UM137	75M	1	UM162*		
UM138	75M	2	UM160	1 Meg.	2
∫UM140	100M	1	UM159	1 Meg.	_ 4
UM143*			UM181‡	2 Meg.	Spec.
UM141	100M	2	UM163	2 Meg.	1
UM142	100M	4			
UM180‡	100M	Spec.	UM165	3 Meg.	1

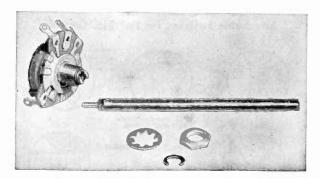
*Clutch type controls—no provision for attachable switch. External adjustable resistor included.

Right hand switch action.



All Mallory plug-in shafts are now made with a small ring as shown in the drawing above. That's why they can't wobble or work loose-why they fit as securely as a fixed shaft.

MALLORY CARBON CONTROLS



 $1\frac{1}{8}$ Dia. • Plug-In Shaft • Single Tapped Controls

APPLICATION—For use as a volume control with tone compensation in audio circuits.

DESCRIPTION—1 1/8" carbon controls with a single tap. Available in a wide range of resistances. Taps are accurately located. Uses Mallory's special resistance element insuring quiet, long life and an excellent safety factor in current-carrying capacity.

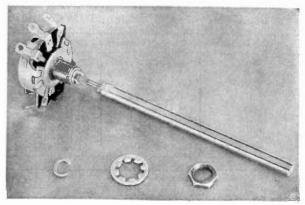
SHAFT DESCRIPTION—The control is provided with a socket which will take 30 different types of shafts insuring maximum flexibility of stock. One SS-1 4" channel shaft furnished with each TM control. (See page 8 for other universal and special plug-in shafts available.)

ACCESSORIES—One hex nut, one lock washer, one lock ring, one shim, and one SS-1 shaft furnished with each control. AC switches available as a special item. (See page 8.)

PACKAGING—One control, plus accessories and complete instructions per display carton.

Catalog Number	Overall Resistance	Tap Resistance	
TM220	250M	50M	
TM221	250M	110M	
TM222*			
TM225	350M	70M	
TM223*			
TM 228	500M	5M	
TM 226	500M	15M	
TM233	500M	60M	
/TM224*	500M	100M	
TM227			
`TM230	500M	150M	
TM231	500M	225 M	
TM232*			
`TM234	1 Meg.	65M	
TM236	1 Meg.	125M	
TM 240	1 Meg.	200M	
TM241*			
TM238	1 Meg.	300M	
TM 239*			
TM242*	1 Meg.	450M	
TM243		1002/2	
TM244	1.5 Meg.	200M	
TM 245	2 Meg.	5M	
TM246	2 Meg.	15M	
TM247	2 Meg.	60M	
TM 250	2 Meg.	125M	
TM248	2 Meg.	250M	
TM254	2 Meg.	400M	
TM 249	2 Meg.	600M	
/TM251	2 Meg.	900M	
TM252*		0	
TM 259	2 Meg.	1 Meg.	
TM 257	3 Meg.	900M	
TM 261	5 Meg.	1 Meg.	

^{*}Clutch type controls—no provision for attachable switch.



1%'' Dia. • Plug-In Shaft • Double Tapped Controls

APPLICATION—For use as a volume control with tone compensation in audio circuits.

DESCRIPTION—1 1/6" carbon controls with double taps. The basic resistance element of this control is the same as the element in MR controls. Taps are accurately spaced.

SHAFT DESCRIPTION—The control is provided with a socket which will take 30 different types of shafts insuring maximum flexibility of stock. One SS-1 4" channel shaft furnished with each DTM control. (See page 8 for other universal and special plug-in shafts available.)

ACCESSORIES—One hex nut, one lock washer, one lock ring, one SS-1 shaft, and one shim furnished with each control. AC switches available as a special item. (See page 8.)

PACKAGING—One control, plus accessories and complete instructions per display carton.

Catalog	0	Tap Resistance		
Number	Overall Resistance	Tap 1	Тар 2	
DTM282	250M	50M	100M	
DTM283	500M	100M	200M	
DTM287	1 Meg.	50M	100M	
DTM 289	1 Meg.	250M	500M	
DTM 291	1.5 Meg.	225M	500M	
DTM 293	2 Meg.	5M	500 M	
DTM 295	2.25 Meg.	250M	500M	
DTM 296	2.25 Meg.	500M	1 Meg.	
DTM 298	3 Meg.	100M	1.5 Meg	

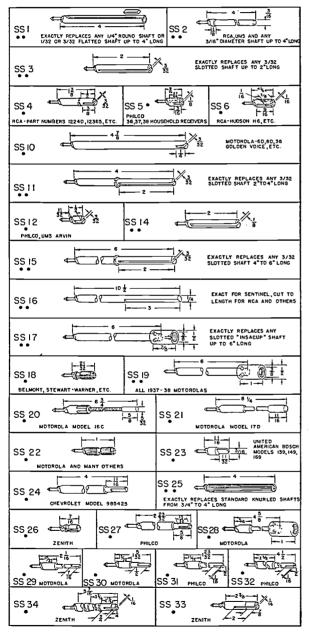
SPECIAL! MALLORY LITERATURE DEAL

See Mallory Literature Page for full information.

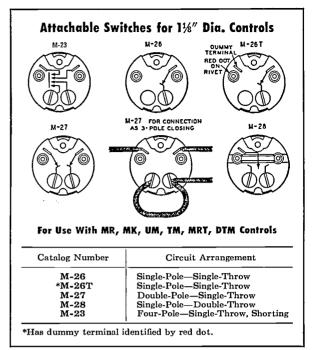
MALLORY PLUG-IN SHAFTS . ATTACHABLE SWITCHES

Universal and Special Plug-In Shafts for Use with Types UM, TM, and DTM Controls

Catalog Number	Catalog Number	Catalog Number
SS1	SS15	SS25
SS2	SS16	SS26
SS3	SS17	SS27
SS4	SS18	SS28
SS5	SS19	SS29
SS6	SS20	SS30
SS10	SS21	SS31
SS11	SS22	SS32
SS12	SS23	SS33
SS14	SS24	SS34



KEY TO SHAFT CHART—*These Plug-In Shafts are designed as exact replacements for applications requiring a given predetermined length with special coupling slots or tongue or an insulated coupler. None of these require any cutting or special adjustment. **These Plug-In Shafts are of universal length and designed for many applications.



Explanation of Mallory Tapers

• Taper Number 1 is a modified logarithmic left hand taper in the carbon type of control and an approximation to this logarithmic taper in the wire-wound type. This taper should always be used in shunt circuits, as in usual antenna and audio circuits, or where only the center and left hand terminals are used.

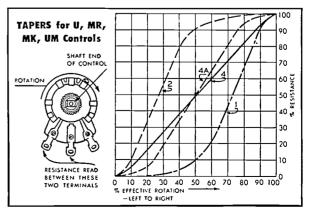
Taper Number 2 is a right hand logarithmic taper in the carbon and an approximation in the wire-wound type. Used in series circuits, as in cathode voltage controls, or where only the center and right hand terminals are used.

Taper Number 3 is a combination left and right hand taper. Has a limited use in circuits where the control must perform both as a shunt and as a series circuit control as in combination antenna shunt plus bias circuits. This is the most common use for such a taper.

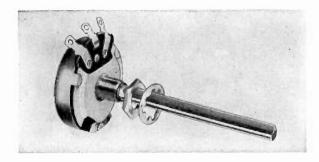
Taper Number 4 is a linear taper. Strictly speaking it is not a "taper" although commonly referred to as such. A linear "taper" is used wherever a control should be such that voltage change is proportional to the degree of rotation.

Taper Number 4A is a modification of the regular linear taper Number 4.

Taper Number 7 is made only in the wire-wound type of control and is a form of left hand taper. This taper is desirable for the antenna shunt plus bias control, wherein greater attenuation is obtained by increasing the bias voltage. The slight left taper then suffices to gradually reduce the signal to zero volume by the shunting action in the antenna circuit.



MALLORY STANDARD CARBON CONTROLS



11/2" Dia. · Fixed Shaft · Carbon Controls

APPLICATION—For volume or tone control in audio circuits.

DESCRIPTION—1½" carbon control made available in a range of resistances and tapers to satisfactorily cover the field. Mallory's exclusive element curing process is used in the manufacture of these controls, as well as in the 1⅓" dia. line.

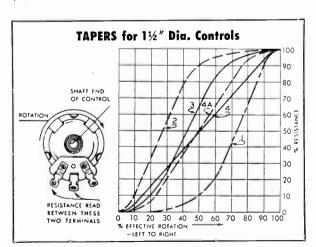
SHAFT DESCRIPTION—A fixed channel or slotted shaft is provided, measuring 3" from lock ring, except as indicated below.

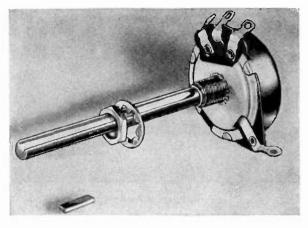
ACCESSORIES—One hex nut, one lock washer, and one shim furnished with each control. An external adjustable resistor is furnished where required, as indicated below. AC Switch available as special item. (See page 11.)

PACKAGING—One control, plus accessories and complete instructions per display carton.

Catalog Number	Ohms Resistance	Taper	Catalog Number	Ohms Resistance	Taper
			VOCAMO	200M	4
Y5MP	5M	4	Y200MP		_
F12 §	7500	1	∫ M	250M	1
UC501 §	10M	2	UC511†		
Y10MP	10M	4	UC509 §	250M	2
H12 §	15M	1	Y250MP	250M	4
Y §	20M	1			
J §	25M	2	UC503	750M	1
Y25MP	25M	4	UC514†	1 Meg.	1
K12	50M	1			
K §	50M	2	UC504	3 Meg.	1
Z12	75M	1	UC505	4 Meg.	1
Z§	75M	2	UC506	5 Meg.	1
_ •			UC507	5 Meg.	2
UC510 §	100M	2	UC508	9 Meg.	1
UC502	150M	1			

§External adjustable resistor included. †Has slotted shaft for automobile receivers.





1½" Dia. · Fixed Shaft · Single & Double Tapped Controls

APPLICATION—For volume control with tone compensation in audio circuits.

DESCRIPTION—1½" carbon controls made available in a wide range of resistances, single and double tapped as indicated.

SHAFT DESCRIPTION—An accurately finished shaft is permanently attached, measuring 3" from lock ring.

ACCESSORIES—One hex nut, one lock washer, and one shim furnished with each control. AC switches available as a special item. (See page 11.)

PACKAGING—One control, plus accessories and complete instructions per display carton.

Single Tapped

	Overall	Тар	9 _	Overall	Тар
Catalog	Resist-	Resist-	Catalog	Resist-	Resist
Number	ance	ance	Number	ance	ance
TRP601	40M	8M	TRP610	1 Meg.	30M
TRP602	60M	4M	TRP608	1 Meg.	200M
TRP617	60M	12M	TRP609††	1 Meg.	500M
TRP623	250M	50M	TRP612	2 Meg.	15 M
TRP603	250M	110M	TRP618	2 Meg.	250M
			TRP613	2 Meg.	400M
TRP604	350M	20M	TRP620	2 Meg.	900M
TRP605	350M	70M			
TRP614†			TRP615	3 Meg.	900M
TRP616	50 0M	60M			
TRP606	500M	100M			
TRP607	500M	225 M			1

†Has slotted shaft for automobile receivers.

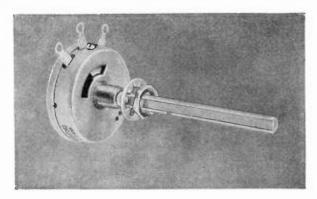
††Special taper for fader service.

Double Tapped

		Tap Resistance	
Catalog Number	Overall Resistances	Tap 1	Тар 2
TRP622 (TRP621 ‡ TRP624	44M 2.25 Meg.	7M 250M	14M 500M

‡No provision for switch.

MALLORY SPECIAL CARBON AND WIRE-WOUND CONTROLS



(SRP262 Illustrated)

$1\frac{1}{2}$ " Dia. • Fixed Shaft • Special Application Controls

APPLICATION—For special applications, as recommended in Mallory Radio Service Encyclopedia.

DESCRIPTION—1½" carbon or wire-wound controls, as indicated, available in a variety of resistances and constructions to meet the special requirements necessary in replacement, as recommended in Mallory Radio Service Encyclopedia.

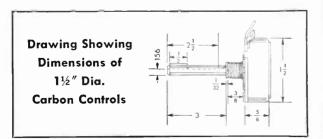
SHAFT DESCRIPTION—A special shaft is permanently attached. It is machined to the exact dimensions necessary to meet replacement requirements.

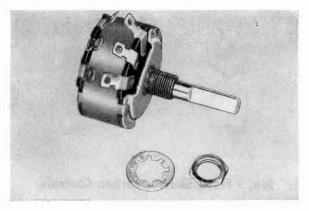
ACCESSORIES—One hex nut, and one lock washer furnished with each control.

PACKAGING—One control, plus accessories and complete instructions per display carton.

Catalog	Ohms	Туре
Number	Resistance	Element
SRP134	4500	W. W.
SRP142	2900	W. W.
SRP152	60	w. w.
SRP153	13M	W. W.
SRP154	50M	Carbon
SRP179	125M	Carbon
SRP185	1500	Carbon
SRP188	32M	Carbon
SRP213	250M	Carbon
SRP239	450	W. W. Strip
SRP241	6M	W. W. Strip
SRP245	32M	Carbon
SRP251	350M	Carbon
SRP261	100M	Carbon
SRP262	1500	W. W.
SRP263	32M	Carbon
SRP269	10M	Carbon
SRP282	350M	Carbon
SRP286	250M	Carbon
SRP289	50M	Carbon
SRP290	1 Meg.	Carbon
SRP900	20M	Carbon
SRP901	10M	Carbon
SRP960	800	W. W.
SRP961	10M	Carbon

†Right hand switch action.





Special Dual Controls

APPLICATION—For special applications, as recommended in Mallory's Radio Service Encyclopedia.

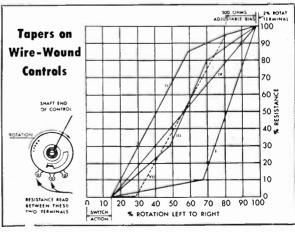
DESCRIPTION—Special controls of wire-wound and /or carbon construction available in a range of resistances and types as required by recommendations of Mallory Radio Service Encyclopedia. They are designed to provide exact physical and electrical characteristics of the original control.

ACCESSORIES—One hex nut and one lock washer furnished with each control.

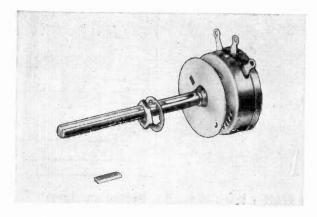
PACKAGING—One control, plus accessories and complete instructions per display carton.

	Ohms Re	esistance	Type E	lement
Catalog Number	Front	Rear	Front	Rear
DRP114	250	5M	W. W.	W. W.
DRP115	3800	3800	Carbon	Carbor
DRP116	25700	10000	W. W.	W. W.
DRP117	500	2500	W. W.	W. W.
DRP119	3M	10M	W. W.	W. W.
DRP122	645	10M	W. W.	W. W.
DRP169	7500	10M	W. W.	W. W.
DRP221	10M	100M	Carbon	Carbon
DRP222	75M	32M	Carbon	Carbon
DRP240	250M	10M	Carbon	Carbo
DRP244	25M	6M	Carbon	Carbo
DRP250	50M	1 M	Carbon	Carbon
DRP302	100M	250M	Carbon	Carbon
DRP304	1 Meg.	3 Meg.	Carbon	Carbon
DRP306*	5M	10M	W. W.	Carbo
DRP311	150M	250M	Carbon	Carbo
		tapped		
		160M		
DRP318	250M	3 Meg.	Carbon	Carbon

*Includes Switch.



MALLORY WIRE-WOUND CONTROLS . 11/2" ATTACHABLE SWITCHES



1½" Dia. • Fixed Shaft • Wire-Wound Controls

APPLICATION—Used as bias controls and voltage dividers in bridge circuits and test instruments.

DESCRIPTION—Rugged resistance strip and contactor assemblies are completely enclosed in a dust-proof case. Will carry 4 watts of power.

SHAFT DESCRIPTION—Furnished with a fixed channel-type shaft, measuring 3" from lock ring.

ACCESSORIES—Mallory Dial Plate No. 396 is available for use with these controls. One hex nut, one lock washer, and one shim furnished with each control. An external variable resistor is furnished where required, as indicated below. Has adjustable stop plate for bias feature, as indicated below. AC switches available as a special item. (See this page.)

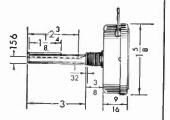
PACKAGING—One control, plus accessories and complete instructions per display carton.

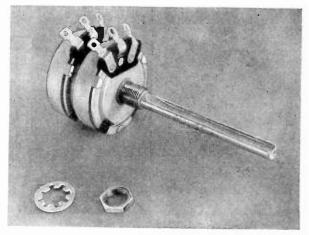
Catalog	Ohms		Catalog	Ohms	
Number	Resistance	Taper	Number	Resistance	Taper
Q .	2	4	D12 §	3000	1
R	6	4	D §	3000	2
S	10	4	A3MP §	3000	4
T	20	4	D7 §	3000	7
U	30	4	A4MP§	4000	4
V	60	4	E §	5000	2
w	100	4	A5MP §	5000	4
X	200	4	E7 §	5000	7
A400P	400	4	F§	7500	2
A	500	1	F7 §	7500	7
A550P	550	4	G §	10000	2
В	1000	1	A10MP 8	10000	4
UC500	1000	2	G7 §	10000	7
A1MP	1000	4	H §	15000	2
C12 §	2000	1	H7 §	15000	7
C§	2000	2	A20MP §	20000	4
A2MP §	2000	4	3	25500	*

§Have exclusive Mallory adjustable bias feature, providing 500 ohms in 100 ohm steps in all values over 1,000 ohms.

Dimensions— 1½" Dia. Wire-Wound Controls

NOTE: Controls having taper numbers 1, 2 and 7 are intended primarily for replacement in radio receivers. Be sure to check the taper curve and its effect (see chart on page 31) before ordering for other uses.





(Type LL Illustrated)

Universal Dual Controls

APPLICATION-See "General Use" column below.

DESCRIPTION—Consists of two 1½" Dia. wire-wound or carbon controls driven by a single shaft.

SHAFT DESCRIPTION—Furnished with fixed channel shaft; measuring 21/2" from lock ring.

ACCESSORIES—One hex nut and one lock washer furnished with each control. AC switches available as a special item. (See this page.)

PACKAGING—One control, plus accessories and complete instructions per display carton.

Cat. No.		ims stance	Та	per		rpe nent	General Use
CE GE	Front 2M 10M	Rear 5M 5M	Front I VII	Rear I IV	Front W. W. W. W.	Rear W. W. W. W.	Ant. Shunt and Bias Ant. Shunt Bias or
GG	10M	10M	VII	ΙV	W. W.	w. w.	Screen Ant. Shunt Bias or Screen
GK	10M	50M	1	IV	Carbon	Carbon	Ant. Shunt Bias or Screen
LL LM	100M 100M	100 M 250 M	1	1	Carbon Carbon	Carbon Carbon	Audio Shunt in Push Pul
MM	250M	250M	1	1	Carbon	Carbon	Audio Shunt in Push Pul

Attachable Switches (1½" Dia. Controls)















7 for connection as 3-pole clasing

For use with standard Universal Controls, Carbon and Wire-Wound types, TRP Tapped Controls, and Universal Dual Controls.

Cat. No. 6-9-Single-Pole-Single-Throw

*6T—Single-Pole—Single-Throw

7-Double-Pole-Single-Throw

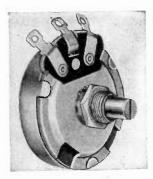
8—Single-Pole—Single-Throw

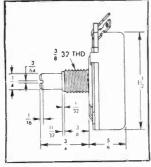
13—Three-Pole—Single-Throw Shorting

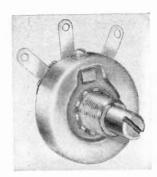
14—Four-Pole—Single-Throw Shorting

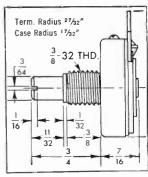
*Has dummy terminal identified by copper rivet.

MALLORY VARIABLE POTENTIOMETERS . T & L PADS









1 Watt · Carbon · Potentiometers

APPLICATION—For use in test and other instruments, and special applications.

DESCRIPTION-1½" heavy-duty carbon-type control with a nominal one-watt rating. No. 4 linear taper.

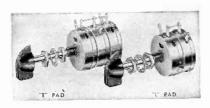
SHAFT DESCRIPTION—A short shaft is provided with a milled screw-driver slot for easy and quick adjustment. Shaft will also take standard knobs.

ACCESSORIES—One hex nut furnished with each control.

PACKAGING—One control, plus accessories and complete instructions per display carton.

Catalog Number	Ohms Resistance
B5MP	5,000
B10MP	10,000
B25MP	25,000
B50MP	50,000
B100MP	100,000
B250MP	250,000
B500MP	500,000
B1000MP	1 Meg.

T and L Pad Attenuators



APPLICATION—For controlling the level of low impedance audio circuits and for volume control of microphones, talking picture amplifiers, and many varied sound amplifying and audio distribution systems.

DESCRIPTION—A high quality "T" and "L" pad that may be used with audio amplifiers having a peak audio rating of 15 watts. These attenuators have a continuous DC dissipation rating of 4 watts in any position. Bushing %" Dia. by %" long.

SHAFT DESCRIPTION—2" long shaft, grooved at popular lengths for easy cutting.

ACCESSORIES—No. 366 Bar Knob, No. 395 Dial Plate with matched rotation, one nut and one lock washer furnished with each control.

PACKAGING—One control, plus accessories and complete instructions per display carton.

"T" Pad Attenuators	"L" Pad Attenuators	
Catalog Number	Catalog Number	Ohms Impedance
Т6	L6	6
TS	L8	8
T15	L15	15
T50	L50	50
T200	L200	200
T250	L250	250
T500	L520	500
T2000	L2000	2000

2 Watt · Wire-Wound · Potentiometers

APPLICATION—For use in test and special instruments, bias control and bridge circuits, etc.

DESCRIPTION—1 1/16" diameter small resistor that will dissipate 2 watts over the entire element for continuous operation. No. 4 linear taper. Contact arm is grounded. Total rotation 284°; effective electrical rotation 266°.

SHAFT DESCRIPTION—A short shaft with a milled screw-driver slot is provided for quick and easy adjustment. Shaft will also take standard knobs.

ACCESSORIES—Dial Plate No. 393 is available for use with these controls. One hex nut furnished with each control.

PACKAGING—One control, plus accessories and complete instructions per display carton.

Potentiometer Catalog Number	Rheostat* Catalog Number	Ohms Resistance	Carrying Capacity in Amps.
C6P	C6R	6	.58
C10P	C10R	10	.45
C15P	C15R	15	.37
C20P	C20R	20	.32
C30P	C30R	30	.26
C40P	C40R	40	.22
C50P	C50R	50	.2
C100P	C100R	100	.14
C200P		200	.1
C400P		400	.07
C1MP		1 M	.045
C3MP		3M	.025
C5MP		5 M	.02
C6MP		6M	.018
C10MP		10M	.014
C15MP		15 M	.011

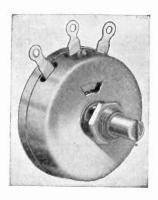
*"Open" or "off" position counter-clockwise.

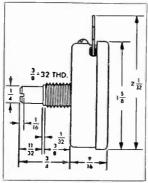
ASK YOUR DISTRIBUTOR ABOUT...

"GOOD SERVICE FOR GOOD BUSINESS"

The Mallory Business-Building Plan
that effectively helps you get
new customers and hold
the ones you have!

MALLORY WIRE-WOUND POTENTIOMETERS





4 Watt · Wire-Wound Potentiometers and Rheostats

APPLICATION—Used on bias controls and voltage dividers in bridge circuits and test instruments.

DESCRIPTION—Precision wire-wound potentiometers and rheostats with a 4-watt rating for use in instruments where reliability is paramount. Rugged construction. Rheostats feature "off" position (no connection) type of construction, saving the cost of a switch. Furnished with insulated contact arm. Potentiometers have three terminals. Rheostats have two terminals. Total rotation 294°; effective electrical rotation 279°. No. 4 Linear Taper.

SHAFT DESCRIPTION—A short shaft is provided with a slot for easy screw-driver adjustment. Shafts will take standard knobs.

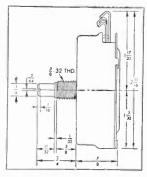
ACCESSORIES—No. 395 Dial Plate is available for use with these controls. One hex nut furnished with each control.

PACKAGING—One control, plus accessories and complete instructions per display carton.

Potentiometer Catalog Number	Rheostat* Catalog Number	Ohms Resistance	Carrying Capacity in Amps.
	M05R	1/2	2.80
M1P	MIR	i	2.00
	M2R	2	1.4
мзр	M3R	3	1.15
	M4R	4	1.00
M6P	M6R	6	.82
M10P	MIOR	10	.63
M15P	M15R	15	.52
M20P	M20R	20	.45
M25P	M25R	25	.40
M30P	M30R	30	.37
M40P	M40R	40	.32
M50P	M50R	50	.28
M60P	M60R	60	.26
M75P	M75R	75	.23
M100P	M100R	100	.20
M200P		200	.14
M400P		400	.10
M500P		500	.09
M600P		600	.082
M1MP		1M	.063
M2MP		2M	.045
M3MP		3M	.037
M4MP		4 M	.032
M5MP		5M	.028
M10MP		10M	.020
M15MP		15M	.016
M20MP		20M	.014
M25MP		25M	.013
M50MP		50M	.009
M70MP		70M	.0075

^{*&}quot;Open" or "Off" position counter-clockwise.





7 Watt · Wire-Wound Potentiometers

APPLICATION—Suitable for precision instruments such as resistance bridges and where a control of medium currents or voltages is required.

DESCRIPTION—Supplied with grounded contact arm. 310° total rotation; 299° effective electrical rotation. Will dissipate 7 watts. No. 4 linear taper.

SHAFT DESCRIPTION—A short shaft with a milled screw-driver slot is provided for easy adjustment. Shafts will also take standard knobs.

ACCESSORIES—No. 399 Dial Plate is available for use with these controls. One hex nut is furnished with each control.

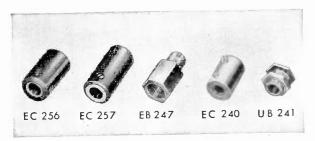
PACKAGING—One control, plus accessories and complete instructions per display carton.

Catalog Number	Ohms Resistance	Carrying Capacity in Amps.
Е5МР	5M	.042
E10MP	10M	.03
E20MP	20M	.021
E25MP	25M	.019
E50MP	50M	.0135
E75MP	75M	.011
E100MP	100M	.0095
E125MP	125M	.0085
E150MP	150M	.0078

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 CONTROL HARDWARE



Shafts · Couplers · Bushings

Cat. No.

Description

EC240-Universal Combination Extension Shaft Coupling and Reducer:

Will couple two 1/4" shafts or one 1/4" shaft and one 3/16" shaft.

Universal Insulated Shaft Couplers:

Designed to connect fixed shaft controls to remote drive couplings popular in automotive radio equipment.

EC256-Slotted Insacup.

EC257—Square Insert Insacup (Motorola type).

EB247—Universal Extension Bushing:

Designed to screw on the present bushing of Mallory controls and switches, so that the body of the control or switch will be held 5/8" away from the mounting surface. For example, it is used with the correct Universal Control to service Philco Models 28, 29, 45 and 45C.

UB241-Universal Bushing and Nut:

Designed to accommodate ¼" shaft wherever a panel bushing is desired. Includes one No. 232 nut.

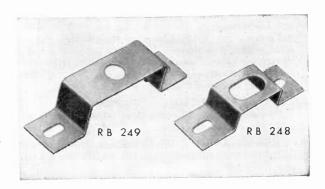


Wrench for Volume Control Nuts

Cat. No.

Description

For all standard Volume Control Hexagon Nuts, 1/2-inch and 9/16-inch diameters.

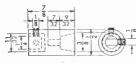


Adjustable Mounting Brackets

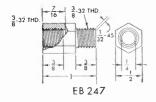
Cat. No.	Description
RB248	1¾" Mounting Centers
RB249	2½" Mounting Centers



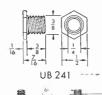
EC 257



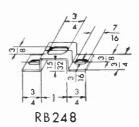
EC 256

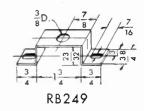


DIMENSIONS -SHAFT COUPLERS AND BUSHINGS



EC 240



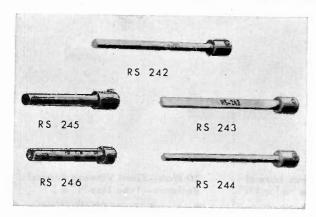


Hexagon Shoulder Nuts

Cat. No.	Description
255	For ¾" Panels
A11260-12	For 1/2" Panels
A11260-2	For ¼" Panels

Mallory Page 14 (See Mallory Page 2 for List Prices)

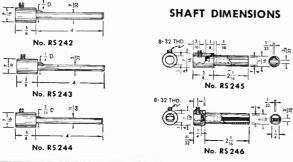
MALLORY CONTROL HARDWARE

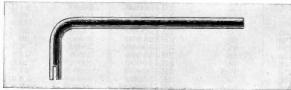


Universal Extension Shafts

Cat. No.	Description	
RS242*	4" long x ¼" dia. x ⅓2" flat	
RS243*	4" long x ¼" dia. x 3/32" flat	
RS244*	4" long x 3/16" dia. x 1/64" flat	
RS245*	2" long x 1/4" dia. with 3/32" slot	
RS246*	2" long x ¼" wide x 3/32" thick	

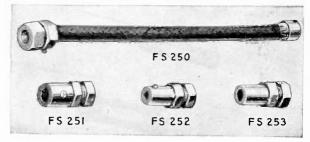
*Packed 5 to Envelope.





Web Removing Tool

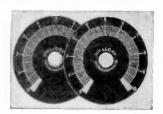
Cat. No.	Description
201	Special tool for removing web from web type knobs to adapt them for use with the Mallory Midgetrol.



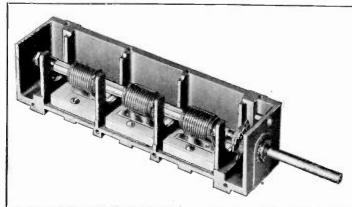
Universal Flexible Coupling Shafts

Cat. No.	Description
FS250	For Universal replacement of all flexible wire shafts, coupling to \%" solid shafts.
FS251	Shaft Coupling has %2" hole, ½" deep, with transverse pin, and is for use (with the correct Mallory control) as a replacement for Philco Models 805, 806, 808, 809 and PHD and PHXD, Studebaker AC266, Pierce-Arrow MT-3, Reo RT-3, etc.
FS252	Shaft Coupling has %2" hole, approximately ½" deep, and has 2 set screws opposite each other. It is used as a replacement for Philco Model D, Nash AC-989 (Code 122).
FS253	Shaft Coupling has ¼" dia. hole, ½" deep, equipped with 2 screws at 90 degrees. This is to be used with the correct Mallory Control as a replacement for Chevrolet No. 364441.

Dial Plates For Controls, Rheostats and Potentiometers



Cat. No.	Marking	For Type of Control	Dia
369	0 to 100	All Rheostats and Potentiom- eters (compromise scale)	21/4"
391	Increase	All Rheostats and Potentiom-	-/-
i	Volume	eters	11/2"
393	0 to 10	For "C" Type Rheostats and	
		Potentiometers	21/4"
395	0 to 10	For Standard Wire-Wound Con- trols with plain cover; also "M" Type Rheostats and Po- tentiometers	o. / #
396	0 to 10	For Standard Wire-Wound Con-	2¼"
207	0 . 10	trols with switch type cover.	21/4"
397	0 to 10	For Standard Carbon Controls with plain cover	21/4"
398	0 to 10	For Standard Carbon Controls	
		with switch type cover	21/4"
399	0 to 10	For "E" Type Potentiometers.	21/4"



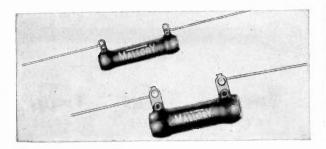
THE MALLORY INDUCTUNER*

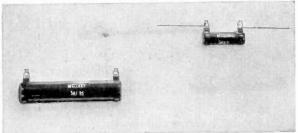
A continuously and infinitely variable inductance unit that supplies the need for a method of tuning the wide range of frequencies covered by the television-FM band. Provides unequaled simplicity, performance, and stability In service. For more complete information turn to Page 9, Mallory Special Components, of this catalog.

Inductuner*—Registered 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. Other patents applied for.

Mallory Page 15 (See Mallory Page 2 for List Prices)

MALLORY FIXED RESISTORS





5 Watt—Fixed Vitreous Enamel Resistors—Tube Size 5/16" x 1" Packaged 10 per Display Carton

Current Milli-amperes Resistance Ohms Catalog Number HHJ1 HHJ1.5 HHJ2 HHJ3 HHJ4 HHJ5 HHJ7.5 HHJ10 HHJ12 2230 1.5 1820 $1580 \\ 1290$ 1117 1000 811 707 644 577 500 450 408 378 353 316 257 223 200 182 158 141 129 119 HHJ200 HHJ250 HHJ300 1105 1000 91 84 81 79 74 70 67 64 63 57 53 50 47 45 40 37 33 33 31 HHJ700 HHJ750 HHJ800 HHJ800 HHJ900 HHJ1000 HHJ1100 HHJ1200 HHJ1250 HHJ1500 HHJ1750 HHJ2000 900 900 1000 1100 1200 1250 1500 1750 2000 2250

*We stock these high resistance values only in the more economical low temperature enamel coating because operating voltages normally encountered rarely exceed the values listed.

2500 3000

10 Watt Fixed Vitreous Enamel Resistors—Tube Size 5/16" x 13/4" Packaged 10 per Display Carton

Catalog	Resistance	Milli-
Number	Ohms	ampers
1HJ1 1HJ2 1HJ3 1HJ4 1HJ5 1HJ7.5 1HJ10 1HJ12 1HJ15 1HJ20 1HJ25 1HJ30 1HJ35 1HJ40 1HJ50 1HJ75 1HJ100 1HJ15 1HJ200 1HJ250 1HJ350 1HJ350 1HJ400 1HJ600 1HJ600 1HJ700 1HJ1250 1HJ1000 1HJ1100 1HJ1100 1HJ1100 1HJ1100 1HJ1100 1HJ1100 1HJ11000 1HJ110000 1HJ1100000 1HJ1100000 1HJ1100000 1HJ1100000 1HJ1100000 1HJ1100000 1HJ1450000 1HJ1450000	1 22 33 4 4 5 7.5 10 12 12 15 20 20 25 30 35 35 40 40 50 225 250 300 350 450 450 250 250 250 250 250 250 250 250 250 2	3150 2200 1800 1580 1400 1150 1000 910 812 707 630 575 530 447 360 220 210 220 210 220 180 170 158 150 141 130 120 115 112 100 95 91 89 81 70 63 63 60 60 60 60 60 60 60 60 60 60 60 60 60

20 Watt-Fixed Vitreous Enamel Resistors—Tube Size 1/2" x 2' Packaged 10 per Display Carton

rackagea 10 per Display Carloli					
Catalog Number	Resistance Ohms	Current Milli- amperes			
2HJ5 2HJ10 2HJ15 2HJ150 2HJ75 2HJ750 2HJ750 2HJ100 2HJ1500 2HJ500 2HJ500 2HJ500 2HJ1500 2HJ1500 2HJ1250 2HJ1750 2HJ1750 2HJ1750 2HJ1750 2HJ1750 2HJ1750 2HJ17500 2HJ27500 2HJ4000 2HJ45000 2HJ45000 2HJ45000 2HJ15000	5 10 15 25 50 75 100 150 200 250 250 300 400 750 1000 1250 1500 2250 2500 2250 2500 3500 4500 4500 6000 6000 6000 1250 1500 1250 1500 2000 2000 2000 2	2000 1415 1153 895 633 517 447 365 316 283 2258 224 200 163 141 126 115 107 100 94 89 85 81 75 71 663 57 57 44 40 33 25 26 16.7 14.3			
2HJ40000 2HJ50000	40000* 50000* 75000*	13.3 11.8 9.7			
2HJ75000 2HJ100000	100000*	8.3			

50 Watt—Fixed Vitreous Enamel Resistors—Tube Size 34" x 41/2"

One Resistor to a Display Carton

Catalog Resistance N	irrent Milli- aperes
	240
	415
	.000
5HJ100 100	707
5HJ250 250	447
5HJ500 500	316
5 HJ750 750	258
5HJ1000 1000	224
5HJ1500 1500	183
5HJ2000 2000	158
5HJ2500 2500	141
5HJ5000 5000	100
5HJ7500 7500	81
5HJ10000 10000	70
5HJ12500 12500	63
5HJ15000 15000	57
5HJ20000 20000	50
5HJ25000 25000	40
5HJ30000 30000	33
5HJ40000 40000	25
5HJ50000 50000	20
5HJ75000 75000	13
5HJ100000 100000	10

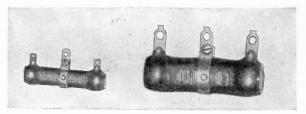
HHJ2250 HHJ2500 HHJ3000

HHJ3500 HHJ4000 HHJ4500

HHJ5000

MALLORY FIXED AND ADJUSTABLE RESISTORS





100 Watt—Fixed Vitreous Enamel Resistors—Tube Size $1^{1}\!\!/8'' \times 6^{1}\!\!/2''$ One Resistor to a Display Carton

200 Watt—Fixed Vitreous Enamel Resistors—Tube Size 11/8" x 101/2" One Resistor to a Display Carton

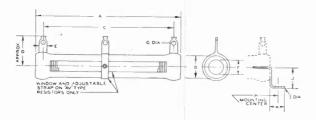
10Watt—Adjustable Vitreous Enamel Resistors—Tube Size 5/16" x 134" One Resistor per Display Carton

Catalog Number	Resistance Ohms	Current Milli- amperes
10HJ25	25	2000
10HJ50	50	1414
10HJ75	75	1155
10HJ100	100	1000
10HJ150	150	815
10HJ250	250	632
10HJ500	500	447
10HJ750	750	365
10HJ1000	1000	316
10HJ1500	1500	258
10HJ2000	2000	223
10HJ2500	2500	200
10HJ5000	5000	141
10HJ7500	7500	115
10HJ10000	10000	100
10HJ15000	15000	80
10HJ20000	20000	70
10HJ25000	25000	60
10HJ30000	30000	50
10HJ40000	40000	37
10HJ50000	50000	30
10HJ75000	75000	20
10HJ100000	100000	15

Catalog Number	Resistance Ohms	Current Milli- amperes
20HJ25	25	2830
20HJ50	50	2000
20HJ75	75	1635
20HJ100	200	1414
20HJ250	250	894
20HJ500	500	632
20HJ750	750	515
20HJ1000	1000	447
20HJ1500	1500	365
20HJ2000	2000	316
20HJ2500	2500	283
20HJ3000	3000	258
20HJ5000	5000	200
20HJ7500	7500	163
20HJ10000	10000	141
20HJ20000	20000	100
20HJ30000	30000	80
20HJ40000	40000	62
20HJ50000	50000	50
20HJ75000	75000	3 3
20HJ100000	100000	25

Catalog Number	Resistance Ohms	Current Milli- amperes		
1AV1	1	3150		
1AV2	3	2200		
1AV3	3	1800.		
1AV5	5	1400		
1AV7.5	7.5	1150		
1AV10	10	1000		
1AV15	15	812		
1AV20	20	707		
1AV25	25	630		
1AV50	50	447		
1AV75	75	360		
1AV100	100	315		
1AV150	150	260		
1AV200	200	220		
1AV250	250	200		
1AV300 1AV350	300	180		
1AV350	350	170		
1AV400	400	158		
1AV500	500	141		
1AV600	600	130		
1AV750 1AV800	750	115		
1AV800	800	112		
1AV1000	1000	100		
1AV1250	1250	89		
1AV1500	1500	81		
1AV2000	2000	70		
1AV2250	2250	66.5		
1AV2500	2500	63		
1AV3000	3000	56		
1AV3500	3500	53		
1AV4000	4000	50		
1AV4500	4500	47		
1AV5000	5000	45		
1AV6000	6000	40		
1AV7000	7000	38		
1AV7500	7500	36		
1AV8000	8000	35		
1AV8500 1AV9000	8500	34		
1AV9000 1AV10000	9000	33		
TWATOOO	10000	32		

Dimensional Drawing of all Types of Resistors



Key to Resistor Dimensions

Rtg. Watts	Туре	A	В	С	D	Ε	F	G	Н	ŧ	J	К
5 10 20	*HHJ *1HJ * 2HJ	1 134	5/16 5/16	1½ 1½ 1½	7/16 7/16 13/16	1/8 1/8 1/4	3/16 3/16 5/16	.070 .070 .144				
50 100 200	5HJ 10HJ 20HJ	4½ 6½ 10½	3/4 1 1/8 1 1/8	534 934	1 1/8 1 1/8	1/4 1/4 1/4	7/6 1/2 1/8 1/8	.144	5 7¼ 11¼	.203 .265 .265	3/4 1 //4 1 //4	11/16
10 25	1AV 2AV	134	5/16 5/8	11/2	7/16 7/8	1/8 1/4	3/16 7/16	.070	2 ⁵ /16	.142	5/8 3/4	7/16
50 80 100 200	5AV 8AV 10AV 20AV	6½ 6½ 10½	5/8 5/8 11/8	6 534 934	7/8 1/8 1/8	1/4 1/4 1/4 1/4	7/16 7/16 3/8 3/8	.144 .144 .144	5 7 7¼ 11¼	.203 .203 .265	3/4 3/4 1/4 1/4	1/16

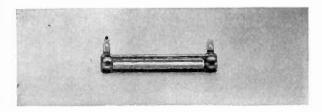
^{*}Types HHJ, 1HJ and 2HJ furnished with lugs and wire leads. Types 5HJ, 10HJ, and 20HJ furnished with lugs.

25 Watt—Adjustable Vitreous Enamel Resistors—Tube Size 58" x 2½" One Resistor Per Display Carton

	op,	441.011
Catalog Number	Resistance Ohms	Current Milli- amperes
2AV1	1	5000
2AV3	3	2890
2AV5	5	2240.
2AV10	10	1580
2AV15	15	1290
2AV25	25	1000
2AV50	50	707
2AV75	75	575
2AV100	100	500
2AV150	150	400
2AV200	200	353
2AV250	250	316
2AV300	300	288
2AV400	400	250
2AV500	500	224
2AV750	750	182
2AV1000	1000	158
2AV1250	1250	141
2AV1500	1500	129
2AV2000	2000	112
2AV2500	2500	100
2AV3000	3000	91
2AV3500	3500	84
2AV4000	4000	79
2AV5000	5000	71
2AV6000	6000	64
2AV7500	7500	57
2AV10000	10000	50
2AV12000	12000	42
2AV15000	15000	33
2AV20000	20000	25
2AV25000	25000	20

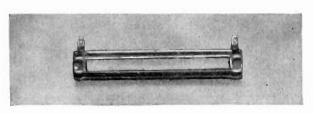
Mallory Page 17 (See Mallory Page 2 for List Prices)

MALLORY ADJUSTABLE RESISTORS



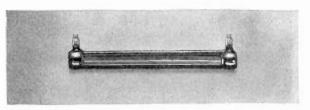
50 Watt—Adjustable Vitreous Enamel Resistors—Tube Size $\frac{5}{8}''$ x $\frac{4}{2}''$ One Resistor per Display Carton

Catalog Number	Resistance Ohms	Current Milliamperes		
5AV5	5	3160		
5AV10	10	2230		
5AV25	25	1410		
5AV50	50	1000		
5AV75	75	816		
• 5AV100	100	707		
5AV150	150	577		
5AV200	200	500		
5AV250	250	447		
5AV300	300	408		
5AV400	400	354		
5AV500	500	316		
5AV750	750	258		
5AV1000	1000	224		
5AV1500	1500	182		
5AV2000	2000	158		
5AV2500	2500	141		
5AV3000	3000	129		
5AV4000	4000	112		
5AV5000	5000	100		
5AV7500	7500	81		
5AV10000	10000	70		
5AV12000	12000	64		
5AV15000	15000	57		
5AV20000	20000	50		
5AV25000	25000	40		
5AV30000	30000	33		
5AV40000	40000	25		
5AV50000	50000	20		



80 Watt-Adjustable Vitreous Enamel Resistors—Tube Size \%" x 61/2" One Resistor per Display Carton

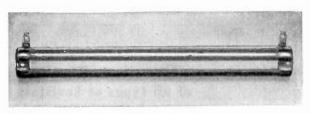
Catalog Number	Resistance Ohms	Current Milliamperes
8AV10	10	2830
8AV15	15	2310
8AV25	25	1790
8AV50	50	1265
8AV100	100	894
8AV250	250	566
8AV300	300	517
8AV400	400	495
8AV500	500	400
8AV750	750	327
8AV1000	1000	283
8AV1500	1500	231
8AV2000	2000	200
8AV2500	2500	179
8AV3500	3500	152
8AV5000	5000	126
8AV7500	7500	103
8AV10000	10000	89
8AV15000	15000	73
8AV20000	20000	63
8AV25000	25000	50
8AV30000	30000	42
8AV40000	40000	31
8AV50000	50000	25
8AV60000	60000	21
8AV75000	75000	16.5
8AV80000	80000	15.5
8AV100000†	100000	12.5



100 Watt—Adjustable Vitreous Enamel Resistors—Tube Size 11/8" x 61/2"

One Resistor per Display Carton

Catalog	Resistance	Current
Number	Ohms	Milliamperes
10AV50	50	1413
10AV100	100	1000
10AV500	500	447
10AV1000	1000	316
10AV2000	2000	223
10AV2500	2500	200
10AV3000	3000	182
10AV4000	4000	158
10AV5000	5000	141
10AV7500	7500	115
10AV10000	10000	100
10AV15000	15000	80
10AV20000	20000	70
10AV25000	25000	60
10AV30000	30000	50
10AV35000	35000	43
10AV40000	40000	37
10AV50000	50000	30
10AV75000	75000	20



200 Watt—Adjustable Vitreous Enamel Resistors—Tube Size 11/8" x 10½"

One Resistor Per Display Carton

Catalog Number	Resistance Ohms	Current Milliamperes
20AV50	50	2000
29AV100	100	1414
20AV500	500	632
20AV1000	1000	447
20AV1500	1500	365
20AV2000	2000	316
20AV2500	2500	283
20AV5000	5000	200
20AV10000	10000	141
20AV20000	20000	100
20AV25000	25000	80
20AV30000	30000	62
20AV50000	50000	50
20AV75000	75000	33

Extra Adjustable Clips

Type No. 1V— For 10-Watt Variohms*
Type No. 3V— For 25, 50, and 80-Watt Variohms
Type No. 6V— For 100 and 200-Watt 1/4" Variohms

†Will be discontinued when present stocks are exhausted.

Mallory Page 18 (See Mallory Page 2 for List Prices)

^{*}Reg. U.S. Pat. Off.



ERIE BUTTON STYLE SILVER MICA CAPACITORS



STYLE CB These are midget silver-mica capacitors, for use where compact size, minimum external inductance, and high internal series resistance are essential. Erie button silver-mica capacitors are unmatched for V.H.F. and U.H.F. work. "Q" at 1 MC is not less than 1000 above 100 mmf; not less than 700 between 50 and 100 mmf; not less than 500 below 50 mmf. Type 370-CB has ring type metal shell with three soldering ears. High potential terminal at either end for feed-thru connection. Type 370-FA is fastened to chassis with 3-48 screw.



STYLI FA

Style	Capacity	Tolerance	List Price
370CB	15	20 %	1.10
and		10 %	1.25
370FA		5 %	1.85
370CB	25	20 %	1.10
and		10 %	1.25
370FA		5 %	1.85
370CB	50	20 %	.80
and		10 %	.90
370FA		5 %	1.30
370CB	100	20 %	.80
and		10 %	.90
370FA		5 %	1.30
370CB	150	20 %	.80
and		10 %	.90
370FA		5 %	1.30
370CB	200	20 %	.90
and		10 %	1.00
370FA		5 %	1.45
370CB	250	20 %	1.00
and		10 %	1.10
370FA		5 %	1.65
370CB	300	20 %	1.10
and		10 %	1.25
370FA		5 %	1.85
370CB	400	20 %	1.10
and		10 %	1.25
370FA		5 %	1.85
370CB	500	20 %	1.10
and		10 %	1.25
370FA		5 %	1.85
370CB	750	20 %	1.75
and		10 %	2.00
370FA		5 %	2.90
370CB	1000	20 %	2.20
and		10 %	2.50
370FA		5 %	3.50



ERIE RESISTOR CORPORATION—ERIE, PA.

ERIE CERAMICONS

STYLE K

STYLE M



STYLE 335



STYLE 334

STYLE L



ERIE CERAMICONS* are small fixed capacitors consisting essentially of a ceramic dielectric with silver electrodes which are fired on at a very high temperature. Erie Ceramicons are outstanding because of their excellent high frequency characteristics, small size, rugged construction and availability in a wide range of capacity values.

Physical dimensions of styles illustrated are:

Style K length .562" diameter .250" Style L length .812" diameter .250" Style 334 length 1.213" diameter .415"

Style 335 length 1.650" diameter .415"

Style M length 1.328" diameter .340"

General Purpose CERAMICONS

"GP" general purpose Ceramicons are ideally suited for such applications as coupling and by-passing, in circuits where temperature coefficient is not important — in other words for all receiver applications except in frequency determining circuits. Working voltage — 500 volts D.C. Use Erie "GP" Ceramicons as replacements for molded mica and paper tubular capacitors.

SPECIFICATION CHART

Style	Capacity (MMF)	Tolerance	List Price
GPIK	10	20 %	.25
GPIK	12	20 %	.25
GP1K	15	20 %	.25
GPlK	18	20 %	.25
GP1K	22	20 %	.25
GPIK	25	20 %	.25
GPIK	27	20 % 20 %	.25
GPIK	33 39	20 %	.25
GP1K	47	20%	.25
GP1K GP1K	50	20 %	.25
GPIK	56	20 %	.25
GPIK	68	20 %	.25
GPIK	75	20 %	.25
GPIK	100	20 %	.25
GP2K	120	20 %	.25
GP2K	150	20 %	.25
GP2K	180	20 %	.25
GP2K	200	20 %	.25
GP2K	220	20 %	.25
GP2K	250	20 %	.25
GP2K GP2K	270 300	20 %	.25

Style	Capacity (MMF)	Tolerance	List Price
GP2K	330	20 %	.25
GP2K	390	20 %	.25 .25
GP2K	470	20 % 20 %	.25
GP2K	500 560	20%	.25
GP2K GP2K	680	20%	.25
GP2K	750	20 %	.25
GP2L	1,000	20 %	.25
GP2L	1,200	20 %	.25
GP2L	1,500	20 %	.25
GP2M	1,800	20 %	.25
GP2M	2,000	20 %	.25
GP2M	2,200	20 %	.25
GP2M	2,500	20 %	.25
GP2M	2,700	20 %	.25
GP2M	3,000	20 %	.25
GP2M	3,300	20 %	.25
GP2M	4,700	20 %	.30 .30
GP2M	5,000 5,600	20 % 20 %	.30
GP2M GP2-334	6,800	20%	.30
GP2-335	7,500	20 %	.30
GP2-335	10,000	20 %	.30
G1 2-000	10,000		

NPO Zero Temperature Coefficient CERAMICONS

NPO zero temperature coefficient Ceramicons are highly recommended for frequency applications where no capacity change with change in temperature is desired. "Q" for NPO Ceramicons above 30 mmf is 1000 or higher. Below 30 mmf "Q" decreases slightly as capacity decreases. Working voltage — 500 volts D.C. Can be used as replacements for silver mica condensers.

Style	Capacity (MMF)	Tolerance	List Price
NPOK	1.5	10 %	.50
NPOK	3	10 %	.50
NPOK	3.3	10 %	.50
NPOK	4.7	10%	.50
NPOK	5	10 %	.50
NPOK	6.8	10%	.50
NPOK	8.2	10%	.50
NPOK	10	10 %	.50

Style	Capacity (MMF)	Tolerance	List Price
NPOK	20	10%	.50
NPOL	25	10 %	.50
NPOL	33	10 %	.50
NPOM	50	10 %	.55
NPOM	75	10 %	,55
NPOM	100	10%	.55
NPO-334	150	10%	.60
NPO-334	175	10%	.60

^{* &}quot;Ceramicon" and "GP" are registered trade names and refer to ceramic dielectric condensers manufactured by Erie Resistor Corp.

Negative Temperature Coefficient CERAMICONS_®

NOSO and N750 units provide temperature compensation to eliminate drift.

SPECIFICATION CHART

ERIE TUBULAR TYPE N750 CERAMICONS

	ERIE	TUBULAR	TYPE	N080	CERAMICONS
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Style	Capacity (MMF)	Tolerance	List Price
N750K N750K N750L N750L N750L	5 10 47 75 100	10 % 10 % 10 % 10 %	.50 .50 .50 .50

Style	Capacity (MMF)	Tolerance	List Price
N080-331 N080-331 N080-338 N080-338 N080-338	10 22 33 47 62	10 % 10 % 10 % 10 % 10 %	.60 .60 .60 .60



ERIE DISC CERAMICONS

Erie Disc Ceramicons consist of a flat Hi-K ceramic dielectric with silver fired on to the dielectric. Lead wires are firmly soldered to the silver electrodes, and the unit is given a protective coating of phenolic. Very efficient at high frequencies.

SPECIFICATION CHART

STYLE 811

Style	Size	Value	List Price
811	19/32" Dia.	.005 min.	.25
821	3/4" Dia.	.01 min.	.30

STYLE 821



ERIE STAND-OFF CERAMICONS.

Stand-Off Ceramicons, an original Erie development, are now widely used for the dual purposes of by-passing R.F. current to ground, and of mechanically supporting other circuit elements. They are especially suited for V.H.F. and U.H.F. applications, due to their low-inductance electrical paths and resultant high resonant frequency.

SPECIFICATION CHART

STYLE 324

Style	Capacity (MMF)	Tolerance	List Price
323 323 323 324 324	50 100 500 1,000 1,500	20 % 20 % 20 % 20 % 20 % 20 %	.60 .60 .60 .60

STYLE 323



This very practical feed-thru capacitor is highly recommended for bypassing R.F. to ground in feed-thru applications. Wire terminals are sufficiently rugged to serve as tie points for several connections, for supporting other circuit elements, and long enough for point to point wiring.



STYLE 362

ERIE FEED-THRU ERIE HIGH VOLTAGE **CERAMICONS**_®



15 KV Ceramicon specially designed for television receiver power supply filter application. The only ceramic condenser on the market with these two extra features:

(1) Ridges on all surfaces to give extra creepage path, and (2) ceramic dielectric

with built-in corona shields for extra protection against internal flashover. Capacity range — 500 mmf minimum. $1\frac{1}{8}$ " diameter x $\frac{7}{8}$ " long. Approved by leading television manufacturers for original equipment.

SPECIFICATION CHART

Style	Capacity (MMF)	Tolerance	List Price
362	1500	20 %	1.00

Style	Capacity (MMF)	Tolerance	List Price
410	500	20 %	2.25



ERIE TUBULAR TRIMMERS



Here is a compact, economical tubular trimmer that is ideal for applications calling for a low minimum capacity and a high ratio of maximum to minimum capacity. Has molded plastic dielectric. Can be mounted on panels having a thickness of .040" to .065"

SPECIFICATION CHART

Style	Capacity Range (MMF)	List Price
532-08	0.5-5	.55
532	1-8	.55

ERIE CERAMICON TRIMMERS

Erie Ceramicon trimmers give maximum stability and ease of adjustment. Capacity change is constant per degree of rotation. Silver electrodes are fired on to ceramic rotor and base. 360 degree rotor completely covers entire track on stator thus preventing dust and other foreign matter from affecting characteristics of the unit.



STYLE

STYLE TD2A

SPECIFICATION CHART

Style	Capacity Range (MMF)	Temperature Coefficient	List Price
TS2A	1.5-7	NPO	1.50
	3-12	NPO	1.50
	4-30	N500	1.50
	7-45	N500	1.50
TD2A	1.5-7 each section 3-12 "" 4-30 " " 7-45 " "	NPO NPO N500 N500	2.50 2.50 2.50 2.50 2.50
557	3-12	NPO	1.25
	5-25	NPO	1.25
	8-50	N750	1.25

ERIE SUPPRESSORS



Erie Suppressors use a special resistance element that is superior because of its low voltage coefficient. These suppressors effectively eliminate ignition interference in auto radios, and in nearby F.M. and Television home sets. Erie Suppressors have a resistance value of 10,000 ohms. Style L-4 fits spark plugs, style L-7 for distributor cables.

Style	List Price
S-5 L-4	.30 .30



STYLE S-5

INSULATED RESISTORS





TYPE BTS INSULATED FILAMENT RESISTOR

(½ watt)

 $^{13}_{32}$ " x $^{1}_{8}$ "—470 ohms to 22 meg 350 volts max.

List 17¢

TYPE BTA INSULATED FILAMENT RESISTOR

(1 watt)

23/32" x 1/4"—330 ohms to 22 meg 500 volts max

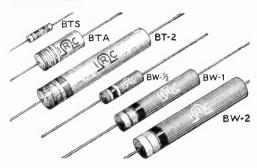
List 25¢

TYPE BT-2 INSULATED FILAMENT RESISTOR

(2 watt)

1¾"x21/₆₄"--470 ohms to 22 meg 500 volts max.

List 50¢



TYPE BT INSULATED FILAMENT RESISTORS are completely insulated with bakelite and unexcelled for stability, lownoise level, low voltage coefficient and mechanical strength. Insulation breakdown of Type BTS is 750 volts to ground; all other type BT's, 1000 volts. Standard tolerance ±10%. Special tolerance ±5% at slightly higher cost.

TYPE BW INSULATED WIRE WOUND RESISTORS are furnished with the same bakelite insulation as BT resistors. The wire resistance element is wound tightly around a special insulated core. Standard tolerance $\pm 10\%$. Special tolerance $\pm 5\%$ at slightly higher cost.

Type BW-1/2 Insulated Wire Wound Resistor

(1/2 watt)

5%" x 3/16"—0.47 to 820 ohms List 17¢

Type BW-1 Insulated Wire Wound Resistor

(1 watt)

1¼" x ¼"—0.47 to 4,700 ohms List 25¢

Type BW-2 Insulated Wire Wound Resistor

(2 watt)

 $1\frac{3}{4}$ " x $2\frac{1}{64}$ "—1.0 to 6.800 ohms List 50¢

STANDARD RANGES

Standardization pays dividends! It can be an important profit factor for you, too.

portant profit factor for you, too.

The great majority of radio parts manufacturers were quick to see the advantages in standardization and adopted the RMA Preferred Ranges some years ago. IRC has pioneered standardization of resistors because close contact with the radio industry has convinced us that such standardization is not only desirable but absolutely essential to carry out the tremendous development and production program of the industry.

This IRC policy will help servicemen prepare for hetter, faster and more profitable business.

Type BT and BW Resistors, in 10% tolerance, are carried in stock in the RMA ranges listed below. Figures in heavy type are the standard RMA 10% tolerance values. Using 10% tolerance BT's and BW's, these 93 ranges give complete coverage of all values with the smallest resistor stock. Standardization of your stock on these values is recommended for economical, complete coverage, faster turnover . . . more profit for you!

However, the intermediate values listed below also are carried in the IRC stockroom, so that every RMA value is available to servicemen when desired.

JOBBERS' STOCK IN PREFERRED RMA RANGES

Subject to the minimum and maximum values for each of the various types of BT and BW Resistors.

Ohms 0.47 0.51 0.56 0.62 0.68 0.75 0.82 0.91 1.0 1.1 1.2 1.3	Ohms 3.0 3.3 3.6 3.9 4.7 5.6 6.2 6.8 7.5 8.2 9.1	Ohms 18 20 22 24 27 30 33 36 39 43 47 51 56	Ohms 110 120 130 150 160 180 200 220 240 270 300 330 360 390	Ohms 680 750 820 910 1,000 1,200 1,300 1,500 1,600 2,000 2,400	Ohms 4,300 4,700 5,100 5,600 6,200 6,800 7,500 8,200 10,000 11,000 12,000 13,000	Ohms 27,000 39,000 33,000 38,000 39,000 43,000 51,000 62,000 62,000 68,000 75,000 82,000 91,000	Megs 0.1 0.11 0.12 0.13 0.15 0.16 0.18 0.20 0.22 0.24 0.27 0.30 0.33 0.36	Megs 0.62 0.68 0.75 0.82 0.91 1.0 1.1 1.2 1.3 1.5 1.6 1.8 2.0 2.2	Megs 5.9 4.3 4.7 5.1 5.6 6.2 6.8 7.5 8.2 9.1 10.0 11.0 12.0
1.3 1.5 1.6 1.8	8.2 9.1 10 11	51 56 62 68	330 360 3 9 0 430	2,000 2,200	12,000 13,000	75,000 82,000	0.30 0.33	1.8 2.0	11.0 12.0
2.0 2.2 2.4 2.7	12 13 15 16	75 82 91 100	470 510 560 620	3,300 3,600 3,900	20.000 22,000 24,000		0.43 0.47 0.51 0.56	3.0 3.3 3.6	18.0 20.0 22.0



INSULATED RESISTORS

Preferred for Performance

BASIC KIT

Designed to meet your day-to-day resistor requirements, the IRC Basic Kit provides a wide variety stock in carefully selected values. Assortments are so arranged that a shortage of stock in one range can usually be compensated for by using two other ranges in series or parallel. Additional adjustable bands are included for use in making up bleeder sections.

The Basic Kit is sturdily constructed of heavy-gauge steel, and beautifully finished in blue and yellow. Hung on your wall or set on your service bench, the Basic Kit saves countless trips for supplies and provides your shop with a neat, carefully selected general purpose resistor stock.

The IRC Basic Kit is factory-packed with the following wide-variety resistor stock:

-10 each—1,000, 2.200, 4,700, 10,000, 15,000, 22,000, 27,000, 47.000, 75,000 ohm; 0.1 meg., 0.22 meg., 0.47 meg., 1.0 meg., 2.2 meg., 10.0 meg. 15.0 meg.

-5 each—470, 1,000, 1,500, 2,200, 3,600, 4,700, 22,000, 36.000, 75,000 ohm.

10 each—10,000, 15,000, 47,000 ohm; 0.1 meg., 0.24 meg. RTA

10 each—10,000, 15,000, 47,000 ohm; 0.1 meg., 0.24 meg. 0.47 meg., 1 meg. BW-½—10 each—100, 150, 220, 330, 470, 560 ohm. BT-2 —5 each—1,000, 2,200, 4,700, 10,000, 22,000, 47,000 ohm; 0.1 meg. BW-1 —5 each—47, 82, 100, 270 ohm. BW-2 —5 each—47, 82, 100, 270 ohm. AB —2 each—100, 250, 500, 750, 1,000, 1,500, 2,500, 5,000, 10,000 ohm; 0.000 ohm.

2 each—100, 250, 500, 750, 1,000, 1,500, 2,500, 5,000, 10,000 ohm.
2 each—15,000, 25,000 ohm.
2 each—100, 250, 500, 1,000, 1,500, 2,500, 5,000,

ABA 2 each—100 10,000 ohm.

EPA

10,000 ohm.

1 each—1,000, 1,500, 2,500, 5,000 ohm.

1 each—10,000, 25,000 ohm.

1 each—1.000, 1,500, 2,500, 5,000 ohm.

1 each—10,000, 25,000, 50,000 ohm.

6 "X-3" Bands.

MW-2J-2 each-10, 20, 50, 100 ohm.

M1034-2 each.

All-Metal Cabinet Furnished at No Extra Cost List Price: \$160.53



Serviceman's Special Assortment Available in Basic Kit

The Basic Kit is also available stocked with a special "Serviceman's Assortment." This assortment contains a complete stock of ½, 1 and 10 watt resistors, plus a selection of controls, shafts and switches. The heavy-duty power wire-wound resistors are not furnished in this assortment-leaving space in the compartments and drawers for capacitors, lamp bulbs, solder, small tools and spare parts.

The "Serviceman's Assortment" is factory-packed with the following:

n the following:

160—BTS resistors

115—BTA resistors

60—BW-½ resistors

20—BW-1 resistors

22—AB power resistors

22—41 switch

1—#42 switch -D13-133 controls 4—D13-133 controls
1—D13-133X control
1—D13-137 control
1—D13-137X control
1—D13-139 control
2—"E" shafts
1—"H" shaft

List Price: \$99.54

RESIST-O-CABINET



The sturdy, IRC Resist-O-Cabinet is specifically designed to hold resistors systematically and safely without the bending of leads. It puts an end to "cigar box contusion!" Its four "non-spill" drawers have seven ample-sized compartments in each which readily accommodate resistor sizes from ½ to 10 watts.

accommodate resistor sizes from ½ to 10 watts.

Attractively finished in blue, yellow and silver. Ohm's Law formulas neatly and permanently lithographed on top of cabinet for handy reference. Cabinet measures 11" long, 5½" high and 5½" deep. Bases of Resisto-O-Cabinets are arranged for stacking so that several cabinets may be used to increase stock capacity. This handy Resist-O-Cabinet is FREE with the purchase of any of the three well-balanced IRO resistor assortments listed. (Cabinet is not sold separately) separately.)

ASSORTMENT No. 1-59 Resistors

Type BTS—One each 1,000, 4,700, 10,000, 27,000, 47,000 ohms: 0.1 meg, 0.27, 0.47 megs.

Type BTA—One each 39,000, 68,000 ohms; 0.15, 0.22 megs. Two each 1,000, 1,500, 2,200, 2,700, 4,700, 15,000, 27,000 ohms; 1.0, 2.2 megs. Three each 10,000, 47,000 ohms; 0.1 meg, 0.27, 0.47 megs.

Type AB 10 Watt—One each 1,000, 1,500, 2,500, 5,000 ohms. Two each 10,000 and 25,000 ohms.

Type ABA, 10 Watt Adjustable-One each 1.000, 2,500, 5,000, 10.000.

List price of Resistors, \$22.87 (Cabinet furnished at no extra charge)

ASSORTMENT No. 2-100 Resistors

Type BW-1/2-Two each 47, 100, 270 ohms.

Type BTS—Two each 3,300, 6,800, 33,000, 68,000, 82,000 ohms; 0.22, 0.33 megs. Three each 470, 1,500, 15,000, 22,000, 39,000 ohms; 0.15, 1.0, 2.2 megs. Five each 2.200, 2,700, 27,000 ohms; 0.27 megs. Six each 1,000, 4,700, 10,000, 47,000 ohms; 0.1, 0.47 megs.

List price of Resistors, \$17.00 (Cabinet furnished at no extra charge)

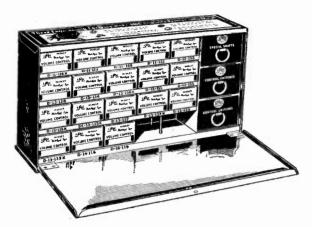
ASSORTMENT No. 3-83 Resistors

Type BW-1-Two each 47, 100, 270 ohms. TYPE BTA—Two each 470, 1,500, 2,700, 3,800, 6,800, 33,000 39,000, 68,000, 82,000 ohms; 0.15, 0.22, 0.33, 1.0, 2.2 mega. Three each 15,000, 22,000, 27,000 ohms. Five each 1,000, 2,200, 4,700, 10,000, 47.000 ohms; 0.1, 0.27, 0.47 megs.

List price of Resistors, \$20.75 (Cabinet furnished at no extra charge)

Preferred for Performance





Check this fast-selling stock!

The IRC Volume Control Cabinet is factory-packed with the following 18 Type D All-Purpose Controls, switches and special shafts.

IRC Control	Resist-	Pur-	IRC Control	Resist-	Pur-
Type No.	ance	pose	Type No.	ance	pose
2-D13-133	500,000	A	1-D13-133X	500,000.	F
1-D11-116	10,000	B	1-DC13-133X	.500,000.	G
1 -D11-123	50,000	C	1-D13-137	1.0.	A
1-D11-128	100,000	C	1-D13-137X	1.0.	F
1 -D11-133	500,000	C	1-D13-139	2.0.	A
1-D13-123	50,000	D	1-D13-139X	2.0	F
1-D13-128	100,000	A	1-D14-116	. 10,000.	H
1-D13-130	250,000	A	1-D16-119	. 20,000.	B
1-D13-130X	250,000	\mathbf{E}			

A--Tone or Audio Circuit
Control
B---Antenna Grid Bias Control
C---Potentiometer Voltage
Divider

D-Tone Control

E—Tapped for A. V. C. F—Tapped for Tone Compensation G—Friction Clutch Auto Radio

Type H—Antenna Grid Blas of 2 Tubes

Switches: 5—No. 41 S.P.S.T.; 1—No. 42 D.P.S.T. Shafts: 1—Type B Auto Radio; 4—Type E knurled and slotted—with thin web

IRC VOLUME CONTROL CARINET

For the Modern Service Shop

This handy stock of IRC Type D Universal Controls, quickly attached switches and easily installed shafts is factory-packed in an attractive all-metal cabinet. Proved by IRC Service Records to be a selection of the most popular controls—you can actually service over 87% of all replacements right from this cabinet. Here is your answer to speedier, more efficient servicing—reduction of costly exact-duplicate inventories—and modern appearance for your shop.

Cabinet measures 14½" long, 7¾" high and 4½" wide. It is handsomely finished in yellow, blue and silver and provides separate compartments for controls and three handy drawers for switches, special shafts and spare parts. Each compartment and drawer is individually marked for identification. The hinged front cover snaps securely shut. The cabinet is furnished at no extra charge when factory-packed with the IRC controls, switches and shafts listed on the left. It is not sold separately.

ORDER YOUR IRC VOLUME CONTROL CABINET TODAY

List Price: \$30.90

NEW IRC ALL-PURPOSE KIT

Here's how to sharpen the appearance of your shop without an additional outlay of cash! 9 "hot-number" IRC ½, 1 and 2 meg. controls are available pre-packed in the All-Purpose Kit with 4 switches and 4 special shafts. Every one a fast mover . . . and you pay only the standard net cost of the merchandise. At no extra cost you receive this attractive 12 compartment utility cabinet.

Buy your "hot-number" controls this way each week and accumulate a shelf of these neat cabinets—each pre-packed with the following IRC merchandise:

IRC Control

Purpose: A—Tone or Audio Circuit control; B—Tapped for tone compensation.

SWITCHES

3 #41 S.P.S.T. 1 #42 D.P.S.T.

SHAFTS

1 Type "A" double-flatted tap-in shaft is included with each control—plus:

3 Type "E" with universal knurl for special type push-on knobs.
1 Type "H" with universal groove for many Delco, RCA, Sears-Roebuck and Westinghouse models.

Sturdy utility cardboard cabinet measures 734"x734"x4½". It is attractively finished in yellow, blue and silver, and provides 4 drawers with 12 compartments. Ideal stocking arrangement for miscellaneous parts—hardware, knobs, capacitators, shafts and dial fittings.



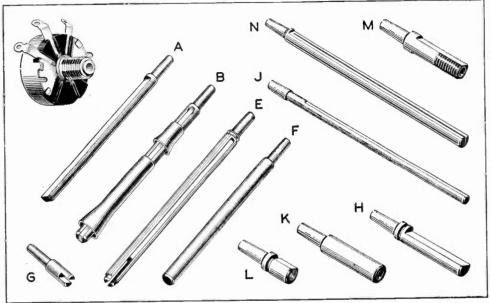
Cabinet furnished at no extra cost.

List Price \$16.20



Preferred for Performance

THE IRC ''CENTURY'' LINE 114 IRC CONTROLS THAT SOLVE 90% OF YOUR REPLACEMENT PROBLEMS



For miscellaneous service needs, 71 all-purpose controls are available for use with the popular IRC tap-in shafts. An A shaft is included with each control and shafts B, E, F, G, H, J, K, L, M and N may be had at slight extra cost. Each D Control accommodates any of the eleven Tap-in Shaft types shown. Shaft flats may be located in any position. A few extra shafts greatly increase the utility of your D Control stock at a small investment. Of unusual convenience is the "Double-Flatted" A shaft, included with each D Control. Accommodates popular push-on knobs

requiring either $\frac{1}{32}$ " or $\frac{3}{32}$ " flats and all set-screw knobs without filing of shaft or use of inserts. Dimensions: $1\frac{1}{8}$ " x $\frac{1}{32}$ ". Single Control—Without switch List \$1.25 Tapped Control—Without switch List 1.85 Prices include Shaft A packed with each control Easily Installed "Tap-in" Shafts

Type B, M—List \$0.45 Types E, F, G, H, J, K, L, N—List \$0.30

70 UNIVERSAL TYPE D CONTROLS with 11 easily installed Tap-In Shafts

Resistance Ohms	Тар	IRC Stock No.	Taper	Usual Application	Resistance Ohms	Тар	IRC Stock No.	Taper	Usual Application
					250M	60M-120M	D18-130XX	Spec.	Audio Control with 2 Tone Taps
500		D11-103	A	Potentiometer Voltage Divider	350M	00.1-120.1	D13-132	C C	Tone or Audio Circuit Control
1 M		D11-108	A	Potentiometer Voltage Divider	350M	35M	D17-132X	Spec.	Audio Control with Tone Tap
2M	_	D11-110	A	Potentiometer Voltage Divider	350M	75M	D18-132X	H H	Audio Control with Tone Tap
3M		D11-112	A	Potentiometer Voltage Divider	500M	75141	D11-133	A	Potentiometer Voltage Divider
4M		D11-113	A	Potentiometer Voltage Divider	500M		D13-133	Ĉ	Tone or Audio Circuit Control
5M	_	D11-114	A	Potentiometer Voltage Divider	500M	125M	D13-133 X	H '	Audlo Control with Tone Tap
5M		D13-114	C	Antenna Control		120M	D14-133	l ü	R.F. Plate Control
5M	_	D14-114	D	*Antenna C Bias Control	500M	25M	D17-133X	Spec.	Audio Control with Tone Tap
7,500	-	D11-115	A	Potentio meter Voltage Divider	500M		D18-133X	Spec.	Audio Control with Tone Tap
10M		D11-116		*Antenna Grid Bias Control	560M	50M 250M	D19-133X	Spec.	Audio Control with Tone Tap
10M	_	D13-116	C	Antenna Control	500M		D18-133XX	Spec.	Audio Control with 2 Tone Taps
10M	_	D14-116		*Antenna Grid Bias of 2 Tubes	500M	100M-200M	D11-137	A A	Potentlometer Voltage Divider
10M		D16-116		*Antenna Grid Bias of 1 Tube	1.0 meg.	_	D13-137	Ĉ	Tone or Audlo Circuit Control
13M	3.M	D18-117X	II	I. F. Shunting Control	1.0 meg.	0.507.0		й	Audio Control with Tone Tap
15M	_	D14-118	D	*Antenna Grid Bias Control	1.0 meg.	250M	D13-137X	D	Tone Control
15M		D16-118	F	*Antenna Grid Bias Control	1.0 meg.		D14-137	Spec.	Audio Control with Tone Tap
20M	_	D16-119	F	*Antenna Grid Bias Control	1.0 meg.	35M	D17-137X		Audio Control with 1 one Tap
25M		D11-120	A	Potentiometer Voltage Divider	1.0 meg.	50M-100M	D17-137XX	Spec.	Audio Control with 2 Tone Taps Audio Control with Tone Tap
25M		D14-120	D	*Grid Bias Control	1.0 meg.	160M	D18-137X	Spec.	Audio Control with 1 Tone Taps
25M	_	D16-120	F	Antenna Control	1.0 meg.	250M-500M	D18-137 XX	Spec.	
30M	6M	D18-122X	H	Audio Control with Tone Tap	1.0 meg.	500M	D19-137X	Spec.	Audlo Control with Tone Tap
44M	7M - 14M	D18-123XX	Spec.	Audio Control with 2 Tone Taps	1.0 meg.	500M	DVC-539X	Spec.	Fader control for fading one
50M		D11-123	A.	Potentiometer Voltage Divider				-	circuit into another
50M	_	D13-123	C	Tone Control	2.0 meg.		D13-139	C	Tone or Audio Circuit Control
50M		D14-123	D	*Antenna Grid Bias Control	2.0 meg.	500M	D13-139X	H	Audio Control with Tone Tap
75M	-	D13-125	C	Tone Control	2.0 meg.	5M	D15-139X	Spec.	Audio Control with Tone Tap
75M		D14-125	Ď	*Grid Bias Control		500M-1.0 meg.	D13-139XX	Spec.	Audio Control with 2 Tone Taps
100M		D11-128	A	Potentiometer Voltage Divider	2.0 meg.	150M	D17-139X	Spec.	Audio Control with Tone Tap
100M	_	D13-128	C	Tone or Audio Circuit Control	2.0 meg.	1.0 meg.	D18-139X	Spec.	Audio Control with Tone Tap
200M	_	D11-129	Ā	Potentiometer Voltage Divider	2.0 meg.	250M-500M	D18-139XX	Spec.	Audio Control with 2 Tone Taps
200M		D14-129	D	*Grid Bias Control	2.0 meg.	50M	D19-139X	Spec.	Audio Control with Tone Tap
250M	_	D11-130	A	Potentiometer Voltage Divider	3.0 meg.	_	D13-140	C	Audio Control
250M	_	D13-130	C	Tone or Audio Circuit Control	5.0 meg.	_	D11-141	A	Potentiometer Voltage Divider
250M	125M	D13-130X	Spec.	Audio Control with A.V.C. Tap	7.0 meg.	1 -	D11-142	A	Potentiometer Voltage Divider
250M		D14-130	D,	*Grid Bias Control	10.0 meg.		D11-143	l A	Potentiometer Voltage Divider
250M	25M	D17-130X	Spec.	Audio Control with Tone Tap					
250M	60M	D18-130X	H	Audio Control with Tone Tap	* Supplied	with 270 ohm l	BW¼ (¼ Wa	tt) Insu	dated Wire Wound Resistor.





THE IRC ''CENTURY''

114 QUALITY CONTROLS THAT OFFER YOU THESE EXCLUSIVE FEATURES

- METALLIZED ELEMENT harder, smoother, moisture-proof, permanent.
- FIVE FINGER CONTACTOR—assures positive, more uniform contact.
- SILENT SPIRAL CONNECTOR--a positive connection between contactor and its terminal.
- STEEL COIL SPRING THRUST WASHER eliminates shaft wobble and end-play.

16 POPULAR DS TYPES

With Fixed Shafts

These sixteen numbers have been the most frequently called for and are furnished with fixed shaft for convenient, easy use. Dimensions: $1\frac{1}{8}$ " x $\frac{17}{32}$ ".

Single (Control-Without	;
	List	
Tapped	Control-Witho	ut
switch	List	\$1.85

Resistance		IRC	1	
Ohms	Tap	Stock No.	Taper	Usual Application
10M		DS11-116	A	Antenna Grid Bias Control
10M		DS14-116	D	*Antenna Grid Bias of 2 Tubes
25M		DS14-120	D	*Grid Bias Control
50M		DS11-123	A	Potentiometer Voltage Divider
100M		DS11-128	A	Potentiometer Voltage Divider
100M	_	DS13-128	C	Tone or Audio Circuit Control
250M		DS11-130	A	Potentiometer Voltage Divider
250M	-	DS13-130	C	Tone or Audio Circuit Control
250M	125M	DS13-130X	Spec.	Audio Control with AVC Tap
250M	60M	DS18-130X	H	Audio Control with Tone Tap
500M		DS13-133	C	Tone or Audio Circuit Control
500M	125M	DS13-133X	H	Audio Control with Tone Tap
1.0 meg.	_	DS13-137	C	Tone or Audio Circuit Contro l
1.0 meg.	250M	DS13-137X	H	Audio Control with Tone Tap
2.0 meg.	- "	DS13-139	C	Tone or Audio Circuit Control
2.0 meg.	500M	DS13-139X	H	Audio Control with Tone Ta

*Supplied with 270 ohm BW-1/2 (1/2 Watt) Insulated Wire Wound Resistor.

TYPE J CONTROLS FOR SPECIAL APPLICATIONS

For a wide variety of sets with specific requirements, you'll find these nine numbers extremely useful. To play safe your stock should include at least one of each.

8 DUAL CONTROLS



Eight popular Dual Controls are included in IRC's new Century Line. Here is a small but carefully selected group of "duals" that will speed many an important repair job! Standard No. 20 series switches can be attached.

List Price \$3.10 each

IR C Stock No.	Unit	Resistance Ohms	Taner
35-1620	Panel Rear	10,000 25,000	CE
61-1623	l'anel Rear	10,000 50,000	F A
33-2828	Panel Rear	0.1 meg. 0.1 meg.	C
33-3030	Panel Rear	0.25 meg. 0.25 meg.	CC
33-3333	Panel Rear	0.5 meg. 0.5 meg.	CC
33-3737	Panel Rear	1.0 meg. 1.0 meg.	C
33-3939	Panel Rear	2.0 meg. 2.0 meg.	C
31-4141	Panel Rear	5.0 meg.	A

8 CLUTCH-TYPE DC CONTROLS

With Tap-in Shafts



Practical for auto radio use and many other applications. Controls have friction clutch drive-arm and are equipped

with a special shaft for use where either a slotted or tongued type shaft is required. Instructions tell how to cut shaft for either application. Switches cannot be used with friction clutch controls. Size same as Type D.

List Price \$1.85 each

IR C Stock No.	Resistance Ohms	Resistance to Tap
DC13-130	250M	
DC18-130X	250M	Tap 50M
DC13-133	500M	
DC13-133X	500M	Tap 125M
DC13-137	1.0 meg.	
DC13-137X	1.0 meg.	Tap 250M
DC13-139	2.0 meg.	_
DC13-139X	2.0 meg.	Tap 500M

2 TYPE S SPECIAL POWER CONTROLS

With Tap-in Shafts

Designed for power requirements of plate circuit tone controls, Type S Controls should be used where the audio output exceeds 2 watts. 134" in diameter, they employ the Tap-in Shaft feature. Use No. 20 series switches listed below.

List Price \$1.25 each

I R C Stock No.	Resistance Ohms	Taper
S11-128	0.1 meg.	A
S13-128	0.1 meg.	C

QUICKLY ATTACHED SWITCHES

	For D and DS Controls	For S and Dual Controls	List
SP., ST. DP., ST. SP., DT. Three Point Four Point SP., DT. atclockwise position. SP., ST. with dummy lug.	No. 41 No. 42 No. 43 No. 45 No. 47	No. 21 No. 22 No. 23 No. 24 No. 25 No. 26 No. 27	\$0.60 0.75 0.75 0.75 0.75 0.75 0.75

8 STANDARD TAPERS

A-Used as potentiometer or rheostat in any circuit where uniform resistance change is required.

B-A semi - logarithmic B—A semi-logarithmic curve used as tone control or audio circuit control.

C—A logarithmic curve.

Used as audio circuit control or antenna shunt

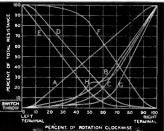
control.

D—Tapered at both ends to provide control of grid bias and antenna circuit.

Used where control of grid bias is of prime importance in controlling volume.

E-Used as a rheostat in cathode

E—Used as a rheostat in cathode circuit to control grid bias. F—Tapered at both ends to provide control of grid bias and antenna circuit. Used where control of grid bias is essential in controlling volume. Generally used where the control changes the



grid bias of only one or two tubes. Must not be used with tubes. Must not be used heavy currents.

G—A logarithmic curve

very gradual change in resistance from left terminal. Used as audio circuit control or antenna shunt control.

H-A tapped logarithmic curve used as audio level control for automatic bass compensation.



Preferred for Performance

TYPE W WIRE WOUND CONTROLS



A dependable wire wound control of uniform resistance change for power requirements up to 2 watts. Tight, uniform windings assure utmost accuracy. Spiral Spring Connector between rotor arm and center terminal eliminates noise. Diameter $1\frac{1}{4}$ "; depth behind panel $\frac{9}{16}$ "; shaft length $2\frac{15}{16}$ " from control face. Illustration shows cover removed, although covers are supplied with controls.

List without switch, \$1.25

IRC Control No.	Resistance Ohms	Max. Current (Amps.)	IRC Control No.	Resistance Ohms	Max. Current (Amps.)
W-2	2	1,000	W-100	100	.142
₩-3	3	.815	W-200	200	.100
W-5	5	.630	W-300	300	.083
W-6	6	.560	W-400	400	.071
W-8	8	.500	W-500	500	.063
w-10	10	.450	W-750	750	.052
W-15	15	.370	W-1000	1000	.045
W-20	20	.320	W-2000	2000	.032
W-25	25	.285	W-3000	3000	.026
W-30	30	.260	W-4000	4000	.022
W-40	40	.225	W-5000	5000	.020
W-50	50	.200	W-7500	7500	.016
W-60	60	.183	W-10000	10000	.014
W-75	7.5	.164			

Television Focusing Controls

W20X10 W10X5	$\begin{smallmatrix}20\\10\end{smallmatrix}$	$\begin{array}{c} ohms-center\\ ohms-center \end{array}$	tap tap	List \$1.85
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Type W Switches

		LIST
No.	51—S. P., S. T	\$0.60
No.	52—D. P., S. T.	75
No.	53—S. P., D. T.	75
No.	54—Three Point	.75
No.	55—Four Pont	.75
No.	56—S. P., D. T. at clockwse postion	.75
No.	57 S. P., S. T., with dummy lug	.75

Plain and Insulated Shaft Couplers

For use with standard controls to meet special shaft requirements. Two set screws give rigid connection.

TYPE C2-Insulated coupler for use with square type shaft used by Motorola. List \$0.30

TYPE C3-Plain coupler to couple 1/4" shafts: insert allows coupling of 1/4" shaft to 18" shaft. List \$0.30

INDUSTRY RED BOOK

IRC control replacements are fully listed in the new "Radio Industry Red Book of Replacement Parts." The correct IRC control replacement for any receiver manufactured from 1938 to 1948 is included. Installation notes are given where necessary.



9 IRC TYPE J CONTROLS FOR MANY SPECIAL REQUIREMENTS!

IRC sales records show that these 9 most popular special controls will handle nearly one-third of your requirements for exact duplicate controls. The group includes concentric duals, and special shaft units. For a more complete stock, carry at least one of each:

DJ-4—2.0 meg (tap 500M ohms)/1.0 meg. RCA: RC-351, A, B, C, D, E, F, M, R, RC-352, A, B, C, RC-386, B ch. Sears-Roebuck: 126.208 Ch. Westinghouse Elec. Supply: WR-264. List \$3.75

DJ-5-2.0 meg/1.0 meg. Zenith: 5637, 5803 Chassis (Dual Con-trol) List \$3.75

J-15-32M ohms. Stewart-Warner: R-100A, B, E, (AC), 950
Series (AC).
List \$1.85 series (AC).

J-107—10M/50M ohms. General Electric: T-41. Graybar: GB-678. Pilot: K-117. RCA: R14, R15. RE17, 42 (Radiola), 48 (Radiola). Westinghouse Elec. & Mfg.: WR-4. List \$3.10

J-127—3800/3800 ohms. RCA: R32, RE45, R52, RE75, 145. List \$3.10

J-296—225M/5M ohms. Philco: 70, 70A below B22,000, 90, 90A (Two 45's), 270, 270A, 370, 470, 470A, 570. List \$3.10

J-777—350M ohms. Chrysler: C1423. Ford: T9, FT9, FT9X, F1440, F1442. Graham: G1418, G1435. Lincoln: L1420, L1424, L1425, L1427, L1429, L1460. Nash: T12-NT 12X, NT 12 X2, T15 NT 15, NT15X, N1418, N1433 H, N1434 H, N1514. Packard: P1417, P1517. Phileo: 811 PA, PB, PV, 816, 817, 818, 821P. 821PV, 826, 827, 827K, 828, 828K. Rec: R1415. Studebaker: T12-ST12, T15-ST15, S1421, S1427, S1421, S1426, W1419. T15-ST15, S1431, S1437, S1516. Willys Overland: W1419.

List \$1.85

J-823-150M/250M ohms (Tap 125M ohms). General Elec.: A-82, List \$3.10 A-86, A-87,

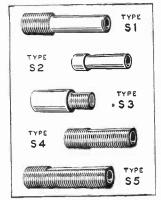
J-843—350M ohms (tap 75M ohms). Chrysler T10-CT10. T11-CT11, C1450, C1452. DeSoto: T10-CT10, T11-CT11. Dodge: T11-CT11. Hupmobile: HT11X. Lincoln: LT 14X3. Packard: T14-PT14. P1422. P1430, P1432 H, P1439. Pierce-Arrow: T14-MT14X4. Reo: T11-CT11, T14-R14X. List \$1.85

EXTENSION SHAFTS

These shafts attach to regular shafts, thus extending length to any needed size, and frequently make it possible to use standard controls for "special" jobs.

								<u></u>	0.
Shaft	No.	441-4"	х	1/4"	dia.	Х	32"	flat\$0.4	40
Shaft	No.	4424"	X	1/4"	dia.	х	32"	flat	40
Shaft	No.	443-4"	х	3"	dia.	X	1 "	flat	40
Shaft	No.	4448"	X	1/4 "	dia.	X	32"	" flat for 4" length4	40

SLEEVE BUSHINGS



TYPE S1-For use with standard controls.

TYPE \$2-To provide bearing

for switching mechanism.
\$1 \$2
List\$0.45 \$0.30

TYPE S3—For use with standard controls to set control back from chassis or mounting bracket. 1½"—½" dia. for ½" 32 thd—344 flat. List \$0.60

TYPE \$4-For use with standard controls to provide $\frac{1}{18}$ dia, bushing, $1\frac{8}{9}$ —thd $\frac{7}{18}$ —28 full length—1.375 dbl flat. List \$0.60

TYPE S5—For use with standard controls to provide ½" dia. bushing. 2¼"—½"—28 full length—.437 flat. List \$0.60

OWER RESISTORS

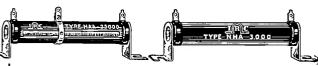


"PREFERRED FOR PERFORMANCE"

Not only do these famous resistors excel electrically, but their "climate-proofed" cement coating provides the most dependable protection yet devised for resistors for heavy duty work. Both fixed and adjustable types are available. Mounting Brackets are packed with all resistors from 25 watts and up. One Adjustable Band is furnished with each adjustable resistor. The new Type X Band (described below) is included as standard on units of 25 watts and above. Extra bands supplied at prices indicated,

FIXED TYPES

							<u> </u>				
10	WATT	'S	20	WATTS		50	WA	TTS	100	WATT	۲s
Ty	pe AB	ļ	Ty	pe DG		Т	ype I	ΕP	Т	уре НА	
134"	x 5/1	.6"	(Co	ntinued)		(Co	ntinu	ied)	61/3	2″ x 1⅓	3″
List	\$0.5	8	Ohms		ax.			Ma		st \$2,03	
		Max	150		a. 65	Ohms 3,00	n	m.:	a. 0 0 hms		Max.
Ohms 1		m. a 3150	200) 3	16			10	5 2		n. a.
2		2210			82	5,00	0	9		0 1	414
3	1	1830	350		$\frac{58}{38}$	6,00	# \$1. n	. 58 8			155
5 7.5		1420 1150	400		24	7,00		7			000 815
10		1000	, ,		00	7,50	0	7	7 25	0	632
15		820	800		63 58	8,00 10,00		7 6			447
20 25		720	850	1	53	Lis	† \$1.		6 75 1,00		365 315
50		640 440	1 1,000		41		0	6	3 Li	\$ \$2.08	
75		360			29	12,50	0	6	0 1,25	0	280
100		315	1 1.250	1	29 26	15,000 20,000)	5 4		0	$\frac{250}{220}$
150 200		260 220	1,500	1:	15	Lis	t \$1.		2,50	0	200
250		200	1,.00		07	25,000)	4	3 3,00	0	180
300		175	1,850 2,000		74 10	30,000)	3			140
350		169	2,250	1	94	Lis	, † \$2.	14 3	4 Lis		115
400 500		157 140	2,500		39	50,000)	3	0 10,00		100
600		125	3,000 3,500		31	60,000)	4- 2	8 Lis	t \$2.47	
750		115	4.000		75 70	75,000	† \$2.	45 21	$ 15,00 \\ 20,00 $		80
800 1,000		$\frac{112}{100}$	4,500	•	36	Lis	t \$2.	65	Lis		70
List	\$0.63		5,000	\$0.88	33	0.1 me	g.	2		0	63
1,250		90	6,000		7				- 30,00		58
1,450 1,500		83 82	7,000	5	3	80	WAT	TS	40,00 Lis	† \$2.81	50
2,000		71	7,500 8,000		1	Ty	pe E	S	50,000	0	44
2,250		67	8,500		8	61/2	″ x ¾	á"	[60,000)	41
2,500 3,000		63	9,000		6	List	\$1.6	57	75,000	f \$3.00	36
3,500		57 53	10,000	4	3	5		4000	Lis	f \$3.17	30
4,000		50	11,000	\$0.94	1	10		2730	0.1 me	g	31
4,500 5,000		47	12,000	4	ô	25 50		1730 1220		WATTS	5
List	\$0.72	45	12,000 12,500	3	9	100		865	Ty	pe HO " x 1 1/8	,,
6,000	.	41	15,000 20,000	3 3		200		612	Lie	" x 11/8 \$2.70	
7,000		37	List	\$1.08	Y	250 500		545	25	28	330
7,500 8,000		36 35	25,000	2	8	750		387 316			000
8.500		0.4	30,000 35,000	2 2	5	1,000		274			14
9,000		33	40,000	2		List	\$1.7		500		332
10,000	\$0.80	91	List	\$1.25	1	1,500 2,000		223 193	100	5	15
11,000	40.00	30	50,000	2	이	2,500		173	1,000 List		47
12,000		28			-	3,000		158	1,500	3	65
12,500 14,800		28		VATTS	1	4,000 5,000		$\frac{137}{122}$	2,000	3	16
15,000		25 25		e EP	1	List	\$1.8	9^~~	2,500 3,000	2	83 58
20,000		22	41/2"	x 3/4"	1	6,000		112	5,000	2	00
	\$0.86		List	\$1.37	1	7,500 8,000		100 98	List	\$2.95	- 1
25,000		20	5	3165	1	0,000		86	7,500 10,000		63
20 W	ATTS		10 25	2230 1390	1	List	\$2.0		List	\$3.13	41
Туре	DG	ĺ	50	1000	. 1 -	5,000 0,000		70	15,000	1	15
2" x 9	/16"	- 1	100	700	'!	List	\$2.30	61	20,000	t2 25 11	00
List \$	0.75	-	$\frac{200}{250}$	500 440	. 1 -	5,000		55	List 25,000	\$3.25	90
1	44	00	500	300	[]3	0,000		50	30,000		81
. 5	20	00	750	250	1	0,000 List	\$2,38	43	40,000		70
$\frac{10}{25}$	14	15 95	1,000	215	5	0,000		39	List 50,000	\$3.36	63
50		38	List : 1,500	\$1.45 175	10	0,000	en	35	60,000		57
75	5	17	2,000	155	1/7	List 5,000	\$2.67	31	List	\$3.55	
100		47	2,500	135	'	List	\$3.00)	75,000	42 75	51
(Conti	nued)	- 1	(Cont	inued)	0	.1 meg		27	0.1 meg		44
					•			'			- 1



ADJ	USTAB	LE T	YPES
-----	--------------	------	------

						1 23	
	10 W	ATTS	25	WATTS	50 W	ATTS	100 WATTS
	Туре			e DHA	Type		
	134" x List \$	5/16"		ntinued)	(Conti		Type HAA
	List s	1 20	1 (00		1	Max.	6½" x 1½"
	-131 -	May	1	Max.	Ohms		Max.
	Ohms	Max.		m. a.	List S	m. a	
-	1	m. a.	-1 200	289		63	List \$2.97
- 1	2	3150		250	15,000		100 1000
- 1		2210		224	10,000	56	200 710
	3	1830	750		120.000	48	400 500
1	. 5	1420	800		List \$		500 447
ı	7.5	1150	1,000		25,000	43	750 365
1	10	1000			30,000	39	1,000 315
ı	15	820	1 050	\$1.58	40,000	34	List \$3.05
1	20	720	1,250	141	List \$	2.75	
ď	25	640	1,500	129	50,000	30	1,500 250
.	50	440	2,000	112	60,000	28	2,000 220
	75		2,250	105	List S	3.06 ^{2°}	2,500 200
	100	360	2,500	100			3,000 180
. [315	3,000	91	75,000	25	4,000 155
1	150	260	3,500	84		3.25	5,000 140
1	200	220	4,000	79	0.1 meg.	21	List \$3.22
1	250	200	5,000	71	80 W	ATTS	6,000 130
1	300	175		\$1.70	Type	ESA	7,500 115
1	350	160			Type 6½″ x	3/."	8,000 110
ł	400	157	6,000	64	List \$	2 27	10,000 100
1	500	140	7,500	58	5 5		
1	600	125	8,000	56		4000	
1	750	115	9,000	53	10		15,000 80
ı	800	112	10,000	50	15		20,000 70
ı	1,000			\$1.75	25	1730	List \$3.64
ł	1,000	25100	12,000	45	50		25,000 63:
ı	List \$1		15,000	41	100	865	30,000 58
ı	1,250	99	20,000	35	200	612	40,000 50
1	1,450	83	20,000	\$1.89	250	545	List \$3.78
1	1,500	82	25,000		300		50,000 44
1	2,000	71	20,000	32	400		60,000 41
ı	2,250	67			500		List \$3.97
ı	2,500	63	50 N	VATTS		387	75 001. 00
ı	3,000	57	Typ	e EPA	750		75,000 36
i	3,500	53	41/2"	x 3/4"	800	305	List \$4.13
ı	4,000	50		\$1.97	1,000	274	0.1 meg. 31
L	4,500	47	5	3165	List \$2		200 WATTS
ı			10		1,500	223	Type HOA
ı	5,000 List \$1	45	25	2230	2,000	193	101/2" x 11/8"
L		.33		1390	2,500	173	List \$3.64
L	6,000	41	50	1000	3,000	158	100 1414
ı	7,000	37	75	810	3,500	145	500 632
1	7,500	36	100	700	4,000	137	
1	8,000	35	150	550	5,000	122	1,000 447
ı	8,500	34	200	500	List \$2		List \$3.70
ſ	9,000	33	250	440			1,500 365
1	10,000	31	300	375	6,000	112	2,000 316
1	<u> </u>		400	350	7,500	110	2,500 283
ĺ	25 WA	ITS 🗆	500	600	8,000	98	3,000 258
ĺ	Type D		750	250	10,000	86	5,000 20 0
Ĺ	21/2" x 9	/16"	800	0.40	List \$2	.65	List \$3.92
1	List \$1	56	1,000	017	15,000	70 1	0,000 141
ı	1	5000		\$2.05	20,000	61	List \$4,12
	3			40.5	List \$2	.92 1	5,000 115
ı		2850	1,250	195	25,000	_ ^	0,000 100
ı	5	2200	1,500	170 9	80,000	50	List \$4.20
ı	10	1580	2,000	155 9	5,000		5,000 90
ı	15	1290	2,500	130 4	0,000		
	25	1000	3,000	120	List \$3		
	50	710	4,000	105	5,000	41	0,000 70
	75	575	5,000	95			List \$4.30
	100	500	List	to 10 1"	0,000		0,000 68
	150	400	7,500	77 6	0,000	35 6	0,000 57
	200	353	8,000	7.6	List \$3.		List \$4.53
	250		0,000	66 8	0,000	30 7	5,000 51
	(Continu	ed) [(Cont	(force)	List \$3,	.62	List \$4.72
_			(Cont.	11464) 0	.1 meg.	27\0	.1 meg. 44
		-	200				
		A	The second	No m	ore wire o	damage v	when the slid-



No more wire damage when the sliding contact band is moved on adjustable resistors. No corrosion at point of contact! The new IRC Type X Positive Pressure Contact Band removes these troubles once and for all. Silver contact button is attached to constant-pressure steel spring.

TYPE X BANDS

Resistor Band "X2" "X3" "X4" DHA EPA·ESA HAA·HOA-Band

STANDARD BAND

Resistor Band List ABA "A" \$0.20



RESISTORS

Preferred for Performance

PRECISION Wire Wound RESISTORS

PRECISION Wire Wound Resistors are scientifically designed and constructed of highest quality materials to combine the utmost in accuracy with dependability. Winding forms are of a non-hygroscopic ceramic having high insulation qualities, high mechanical strength and low-coefficient of expansion. Because of the special sectional construction which permits the winding of adjacent sections in opposite directions, a noninductive winding is made possible. Minimum temperature coefficient of .02% per degree C. now available on all IRC Precisions at no extra cost.

These units are used by the leading instrument manufacturers for dependable precision meter multipliers and shunts, decade boxes and calibrated gain controls. 1% accuracy is standard. Closer tolerances available at slightly higher prices as follows: for ½% tolerance, add 10%: for ½% accuracy, add 15%; and for 1/10 of 1%, add 25% to list prices. Tolerances of 1/10 of 1% are measured to new International Ohm, and so indicated on label.

TYPES WW3, WW4, WW5

	1.75
10, 25, 50, 100, 200, 250, 300, 500, 1,000, 1,500,	1.70 1.75
2,000 and 2,000 dimes	1.90
60 000 and 75 000 ohms	2.25
	2.45
0.195 and 0.15 megohms	3.20
0.175 and 0.9 megohius	2,20
0.225 and 0.25 megohms. 0.3 megohms	3.80
0.4 megohns	4.70
0.5 merolims	5.00
0.6 megohnis	0.23
0.75 megohms	8.65
0.9 megohins 1.0 megohins	9.35
Note Minimum stock range: WW3-1 ohm WW5-0.6 megor	ıms.
Maximum stock range: WW3-0.15 megohms;	
WW4-0.5 megohins.	

TVDE \4/\4/2

		111 - 1111-	List
0.6	megohms	•	7.00
1.0	megohms		15.35
2.0	megonina		24.20
4.0	meg omno		

ALL-METAL RHEOSTATS



PR-25 (25 Watts) 121" diam. Depth behind panel, 31"

PR-50 (50 Watts) 2 3% " diam. Depth behind panel, 1 % " Operating temperatures are cut almost in half by the unique, all-metal aluminum construction of these new IRC Rheostats. They dissipate heat more rapidly-give ample safety factor. Ratings based on hottest spot temp, rise of only 140 degrees C. with max. load distributed over entire element. With full load applied to as little as 25% of element, rise is only 160 degrees C. Exclusive IRC Spiral Connector gives positive contact between rotor arm and center terminal.

Ohms Max. m.a. Price Ohms m.a. Price 1 5,000 \$5.85 0.5 10,000 \$6 2 3,450 5.20 1 7,070 6 3 2,880 5.20 2 5,000 5 6 2,040 5.20 4 3,520 5 8 1,770 5.20 6 2,880 5 10 1,580 5.20 8 2,500 5 15 1,290 5.20 12 2,040 5 25 1,000 5.20 16 1,770 5 25 845 5.20 22 1,500 5 50 709 5.20 35 1,190 5 75 575 5.20 80 790 5 100 500 5.20 80 790 5 125 445 5.20 150 575 575 550 <	PR-2	25—25 Wa	tts	PR-5	5050 Wa	tts
1 5,000 \$5.85 0.5 10,000 \$6 2 3,450 5.20 1 7,070 5 3 2,880 5.20 2 5,000 5 6 2,940 5.20 4 3,520 5 8 1,770 5.20 6 2,880 5 10 1,580 5.20 12 2,500 5 15 1,290 5.20 12 2,040 5 25 1,000 5.20 16 1,770 5 35 845 5.20 22 1,500 5 50 709 5.20 36 1,190 5 75 575 5.20 80 790 5 100 500 5.20 80 790 5 175 375 5.20 125 630 5 175 375 5.20 225 470 5 <td< th=""><th>Ohms</th><th></th><th></th><th>Ohms</th><th></th><th>List Price</th></td<>	Ohms			Ohms		List Price
1,500 100 5.85 2,500 140 6 2,500 150 6 3,500 70 6.18 5,000 70 6.8 8,000 79 6	1 2 3 6 8 10 15 25 50 75 100 125 250 350 750 175 250 350 750 1,500 1,500 2,500 2,500	5,000 3,460 2,880 2,040 1,770 1,580 1,290 1,000 8445 709 575 500 445 8775 315 267 222 173 155 129 100 84	\$5.85 5.20 5.20 5.20 5.20 5.20 5.20 5.20 5.2	1 2 4 6 8 12 16 22 35 50 80 125 150 225 300 500 800 1,000 1,600 2,500 3,500 5,000 8,000	7,070 5,000 3,520 2,880 2,500 2,040 1,770 1,500 1,100 790 630 575 470 407 315 252 177 140 120 100 79	\$6.50 5.85 5.85 5.85 5.85 5.85 5.85 5.85 5

Type NAB Parasitic Suppressors

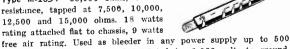
IRC Type NAB Non-Inductive Wire Wound Resistors are designed for use, one in each grid of audio driver or power amplifier tubes when paralleled, to prevent parasitic oscillations, 10 watts.



Type NAB-50 ohms. List \$1.20 each

Bleeder Resistor

Type M-1034-25,000 ohms, overall resistance, tapped at 7,500, 10,000, 12,500 and 15,000 ohms. 18 watts rating attached flat to chassis, 9 watts



volts. Sealed in bakelite and insulated for 1,000 volts to ground. Bracket supplied. M-1034-IRC Bleeder Resistor List \$1.25 each

Center Tap Insulated Wire Wounds



Completely enclosed in molded bakelite and capable of standing high
temperatures. Due to high power rating, these resistors may be used in
balancing circuits for radio receivers
or transmitters. They will carry up to five watts if mounted on
chassis, using the detachable mounting bracket and heat-dissipating
metal strip; or two and one-half watts if mounted in open air.
May be mounted anywhere without danger to units from heat or
grounding. Dimensions: Length of molded unit 2". With bracket
mounting centers 2½". Six standard ranges: 10 ohuns, _0 ohms,
50 ohms, 75 ohms, 100 ohms and 200 ohms.

List 35c each

Type MW-2J-Center Tap Resistors......

Type MC and MCB Suppressors



IRC Suppressors are designed for the elimination of ignition noise in automobile and motorboat radio installations-and oil burner interference in home receivers.

Either Type List 30c

Printed in U.S.A

OHMITE * HEOSTATS ORS THE STATES OF STATES OF

OHMITE RHEOSTATS

All-Porcelain - Vitreous-Enameled

The design and construction of these sturdy, compact Ohmite Rheostats insure permanently smooth, gradual, close control. The wire is wound over a porcelain core, bonded to porcelain base, and permanently locked in place by special Ohmite Vitreous Enamel. Nothing to smoke, char, shrink, or shift. Dissipates heat rapidly. Insulated shafts and bushings. Copper graphite contacts. Ratings are for "free air" use. Time-proved through long trouble-free service in countless installations the world over. Underwriters' Laboratories Listed.





MO	DEL	"H"	25	Watt	
ameter	1 %"	Denth	behind	nanel	13/6"

Stock No.	Ohms	Max. Mils.	List Price	Stock No.	Ohms	Max. Mils.	List Price
0140	1	5,000	\$5.85	0152	125	445	\$5.20
0141	2	3,540	5.20	0153	175	375	5.20
0142	3	2,880	5.20	0154	250	316	5.20
0143	6	2,040	5.20	0155	350	267	5.20
0144	8	1,770	5.20	0156	500	222	5.20
0145	10	1,580	5.20	0157	750	182	5.20
0146	15	1,290	5.20	0158	1,000	155	5.85
0147	25	1,000	5.20	0159	1,500	129	5.85
0148	35	845	5.20	0160	2,500	100	5.85
0149 0150 0151	50 75 100	707 575 500	5.20 5.20 5.20	0161 0162	3,500 5,000	84 70	6.18 6.18

MODEL "J" 50 Watt Diameter 2 %". Depth behind panel 13%"

Stock - No.	Ohms	Max. Mils.	List Price	Stock No.	Ohms	Max. Mils.	List Price
0308	0.5	10,000	\$6.50	0321	150	575	\$5.85
0309	1	7,070	6.50	0322	225	470	5.85
0310	$\bar{2}$	5,000	6.50	0323	300	408	5.85
0311	4	3,530	5.85	0324	500	316	5.85
0312	6	2.880	5.85	0325	800	250	6.18
0313	8	2,500	5.85	0326	1,000	224	6.18
0314	12	2,040	5.85	0327	1,600	176	6.18
0315	16	1.760	5.85	0328	2.500	141	6.18
0316	22	1,500	5.85	0329	3,500	119	6.50
0317	35	1,190	5.85	0330	5.000	100	6.50
0318	50	1.000	5.85	0331	8.000	79	6.50
0319	80	790	5.85	0332	10,000	70	6.50
0320	125	630	5.85		,		

DIRECTION INDICATOR POTENTIOMETER—MODEL RB-2



A compact, low cost unit which is used in a simple 6 volt potentiometer circuit as a transmitting element, to indicate, remotely the position of a rotary beam antenna, or other device. The indicating meter can be any ordinary 0-1 M.A., 0-1.5 M.A. or 0-2 M.A. direct current mil-

liammeter (with marked scale). The potentiometer is 2-5/16'' in diameter and extends 1%'' behind the mounting surface. Single hole mounted by means of a %-3 threaded bushing. Complete 360° rotation.

Stock No. RB-2, Potentiometer

Copyright by U. C. P., Inc.

List Price\$8.13

MODEL "K" 100 Watt Diameter 31/8". Depth behind panel 13/4"

Stock No.	Ohms	Max. Mils.	List Price	Stock No.	Ohma	Max. Mils.	List Price
0440	0.5	14.100	\$9.75	0452	200	707	\$9.10
0441	1	10,000	9.75	0453	300	575	9.10
0442	2	7,070	9.75	0454	400	500	9.10
0443	3	5.750	9.75	0455	500	447	9.10
0444	5	4,470	9.75	0456	750	365	9.10
0445	7.5	3,650	9.10	0457	1,000	316	9.75
0446	10	3,160	9.10	0458	1.500	258	9.75
0447	16	2.500	9.10	0459	2.000	224	9.75
0.148	25	2,000	9.10	0460	2,500	200	9.75
0449	50	1.410	9.10	0461	5.000	141	10.40
0450	75	1,150	9.10	0462	7,500	115	11.05
0451	100	1,000	9.10	0463	10,000	100	11.70

MODEL "L" 150 Watt

		Diamete	r 4″. Dep	th behind	d panel 2"		
Stock No.	Ohms	Max. Mils.	List Price	Stock No.	Ohms	Max. Mils.	List Price
0524	0.5	17,300	\$12.35	0537	150	1,000	\$11.70
0525	1	12,300	12.35	0538	200	865	11.70
0526	2	8,650	12.35	0539	250	775	11.70
0527	3	7,070	12.35	0540	350	655	11.70
0528	5	5,480	12.35	0541	500	548	11.70
0529	7.5	4,470	12.35	0542	750	447	12.35
0530	10	3,880	11.70	0543	1,250	346	12.35
0531	15	3,163	11.70	0544	1,800	288	13.00
0532	25	2,450	11.70	0545	2,250	259	13.00
0533	35	2,070	11.70	0546	3,000	224	13.00
0534	50	1,735	11.70	0547	4,500	182	13.65
0535	75	1,415	11.70	0548	7,500	141	14.30
0536	100	1,225	11.70	0549	10,000	122	15.60

MODEL "N" 300 Wat

Stock No.	Ohms	Max. Mils.	List Price	Stock No.	Ohms	Max. Mils.	List Price
0650	1	17,320	\$17.55	0661	100	1,730	\$17.55
0651	2	12,240	17.55	0662	150	1,410	17.55
0652	3	10,000	17.55	0663	200	1,220	17.55
0653	4	8.660	17.55	0664	300	1,000	17.55
0654	5	7,750	17.55	0665	400	866	17.55
0655	7.5	6,320	17.55	0666	700	655	17.55
0656	10	5,480	17.55	0667	900	578	17.55
0657	15	1,170	17.55	0668	1,200	500	17.55
0658	25	3,460	17.55	0669	1,500	147	17.55
0659	50	2,450	17.55	0670	1.750	414	17.55
0660	75	2.000	17.55	0671	2,500	346	17.55

OTHER OHMITE RHEOSTATS

Ohmite Rheostats are also available in Model G, 75 Watt; Model P, 225 Watt; Model R, 500 Watt; Model T, 750 Watt; and Model U, 1,000 Watt units, in many resistance values. Special Rheostats with tapered windings, etc., can be supplied; also Special Rheostats for Model Train Control. Cages and other accessories also available.

R-51

OHMITE DIVIDOHM RESISTORS

OHMITE FIXED RESISTORS



All-Porcelain Vitreous-Enameled



You can adjust the resistance or secure odd resistance values quickly with these Dividohms; easily put on more taps where needed. Ideal voltage dividers. With one adjustable lug and with mounting brackets.

Extra-sturdy, wire-wound, all-porcelain resistors with the permanent protection of Ohmite Vitreous Enamel. Widely used for heavy duty applications to assure continuous trouble-free service. With mounting brackets.

mounting	g bracke	ts							WICH	mountin	g Diack	cus.					
Core Siz		10 WA		g Center	s 2½"	Core Size	. 1 // 9 /	50 WA		g Cente	ro 43//	Core Size		100 W.		g Center	s 73/8"
	stable F			stable R		Core size	3 -4 - X 716								Resist.	Adj. I	lesist.
Res.	Max. Mils.	Stock No.	Res. Ohms	Max. Mils	Stock No.	Res. Ohms	Max. Mils.	Fixed Stock No.	List Price	Adj. F Stock No.	List Price	Res. Ohms	Max. Mils.	Stock No.	Price	Stock No.	List Price
2 3 5	2,235 1,825 1,415	1001 1002 1003 1004	750 800 1,000 1,250 1,500	111 100 89	1021 1022 1023 1024	5 10 25	3,160 2,235 1,414	0400A 0400B 0400C	\$1.37 1.37 1.37	0560 0561 0562	\$1.97 1.97 1.97 1.97	5 10 25 50 75	4,470 3,160 2,000 1,414 1,153	0600A 0600B 0601 0602 0603	\$2.03 2.03 2.03 2.03 2.03	0956 0957 0958 0959	\$2.97 2.97 2.97 2.97
10 15	1,000 816	1005 1006 1007	2,000 2,250 2,500 3,000	69	1025 1026 1027 1028	50 75 100	1,000 816 707 577	0400E 0400E 0400F 0400G	1.37 1.37	0563 0564 0565 0566	1.97 1.97 1.97	75 100 150 250	1,000 816 632	0604 0605 0606	2.03 2.03 2.03	0960 0960B	2.97 2.97
20 25 50	632	1008 1009 1010	3,000 3,500		1029 1030	150 200 250 300	500 447 408	0400H 0401		0567 0568 0568B	1.97 1.57 1.97	250 500 750 1,000	447 365 316	0607 0608 0609	2.03 2.03 2.03	0961 0962	2.97 2.97
75 100 150	$\frac{316}{258}$	1011 1012 1013	4,000 4,500 5,000	47 45 43	1031 1032 1033	400 500	353 316	0402	1.37	0568C 0569	1.97 1.97	1,500 2,000 2,500 3,000	258 223 200 182	0610 0611 0612	2.08 2.08 2.08 -2.08	0962B 0963	3.05 3.05
200 250 300 350	223 200 182 169	1014 1015 1016	6,000 7,000 7,500 8,000	43 38 34 33 31	1034 1035 1036 1037	750 1,000 1,250 1,500	258 223 200 182	0403 0405 0406	1.37 1.37 1.45	0570 0572 0572B 0573	1.97 1.97 2.05 2.05	5,000 5,000 7,500 10,000	141 115 100	0613 0614 0615 0616	2.08 2.25 2.25	0964 0965	3.05 3.22
400 500 600	158 141 129	1017 1018 1019 1020	8,500 9,000 10,000	29 28 26	1038 1039 1040	2,000 2,500 3,000	158 141 129 119	$0407 \\ 0408$	1.45 1.45 1.45	0574 0575 0576	2.05 2.05 2.05	15,000 20,000 25,000	81 70 53	0617 0618 0619	2.47 2.47 2.67	0966 0967 0968	3.42 3.42 3.64
List Pric	ce, 1,250	1000 ohn to 5,000	ohms .		. 1.25	3,500 4,000	111	0410	1.45	0576B 0577 0577B	2.05 2.05 2.05	30,000 40,000 50,000 60,000	47 36 29 24	$0620 \\ 0621 \\ 0622 \\ 0623$	2.67 2.67 2.81 2.81	0969 0970 0971	3.64 3.64 3.78
List Pric		to 10,00			1.33	4,500 5,000 6,000 7,000	105 100 91 84	0411	1.45	0578 0578B 0578C	2.05 2.19 2.19	75,000 100,000	19 15	0624 0625	3.00 3.17	0972 0973	3.97 4.13
Core Siz	e 2″x %′		ATTS Mountin Resist.	g Center		7,500 8,000 9,000	81 79 74 70	0412	1.58 1.58	0579 0580 0580B	$2.19 \\ 2.19 \\ 2.19$	160 Wat Mountin	g Cent	ers 93/8 e 200 W	"avai	lable in sistors.	same
Res. Ohms	Max. Mils.	Stock No.	List Price \$0.80	Stock No.	List Price \$1.56	10,000 12,000 15,000	70 64 57	0415	1.58 1.75 1.75	0581 0582 0583	2.19 2.36 2.36	5	ıms		List Pric	ce Lis	t Price
2 3 5 7.5	3,535 2,885 2,235	0200K 0200L 0200A	.80 .80	0360B 0361 0362 0362B	1.56 1.56 1.56	20,000 25,000 30,000	48 41 36	$0417 \\ 0418$	1.75 1.95	0584 0585 0586	2.36 2.55 2.55	10 to 1,0 1,500 to 7,500 & 15,000 &	5,000 10,000	 	$\frac{2.53}{2.75}$		3.45 3.50 3.70 3.92
7.5 10 15 20	1,825 1,580 1,290 1,117	0200B 0200R	.80 .80	0362B 0363 0364 0364B	1.56 1.56 1.56 1.56	35,000 40,000 50,000 60,000	32 28 23 19	0419 0420	1.95 2.14	0587 0588 0589	2.55 2.75 2.75	20,000 to 50,000 & 75,000 . 100,000	40,000 60.000		$\frac{3.03}{3.13}$		4.00 4.12 4.30
25 50	1,000 707	0200C 0200D	.80	0365 0366	1.56 1.56	75,000 80,000 100,000	16 15 12	0421	2.45 2.65	0590 0591	3.06 3.25			200 W	ATTS	_	4.53
75 100 150	577 500 408	0200E 0200F 0200G	.80 .80	0367 0368 0369	1.56 1.56 1.56	====		75 W.				Core Size	6.320	0900A 0900E	\$3.75	1356 1357	\$4.72 3.64
200 250 300 400	353 316 288 250	0200H 0201	.80	0370 0371 0371B 0371C	1.56 1.56 1.56 1.56	Core Size	e 6" x :	%"	Mounti:	ng Cente ustable I		10 25 50 75 100	4,470 2,828 2,000 1,635 1,414	0901 0902 0903 0904	2.70 2.70 2.70 2.70	1358 1359 1360	3.64 3.64 3.64
500 750 800	223 182 176	$0202 \\ 0203 \\ 0204$.80 .80 .80	0372 0373 0374	1.56 1.56 1.56	Ohms I	Max. Vils. 3,870	Stock No. 0769	Res. Ohms 5,000	Max. Mils 122	Stock No. 0783	150 250 500	1,153 894 632	0905 0906 0907	2.70 2.70 2.70	1360B 1361	3.64 3.64
1,000 1,250	158 141	0205	.80	0375 0375B 0376	1.56 1.58 1.58	10 2 15 2 25	2,735 2,236 1,732	0770 0771 0772	6,000 7,000 7,500	111 103 100	0783B 0783C 0784	750 1,000 1,500	516 447 365	0908 0909 0910 0911	2.70 2.70 2.75 2.75	1362 1362B	3.64 3.70
1,500 2,000 2,250 2,500	129 111 105 100	0206 0207 0208	.86 .86	0377 0377B 0378	1.58 1.58 1.58	100 200 250	1,224 866 612 547	0773 0774 0774B	8,000 9,000 10,000 12,000	96 91 86 79	0784B 0784C 0785 0785B	2,000 2,500 3,000 5,000	316 283 258 200	0912 0913 0914	2.75 2.75 2.75 2.75	1363 1364	3.70 3.70
3,000 3,500 4,000	91 84 79 74	0208 0209 0210 0211	.86 .86	0379 0380 0381	1.58 1.58 1.58	300 400 500	500 433 387	0775 0775B 0775C 0776	12,000 15,000 20,000 25,000	70 61 49	0786 0787 0788	7,500 10,000 15,000	163 141 115	0915 0916 0917	2.95 2.95 3.13	1365 1366	3.92 4.12
1,500 5,000 6,000	74 70 64	0212 0213	.86 .94	0381B 0382 0383	1.58 1.58 1.70	750 1,000 1,250	316 273 245 223	0777 0778 0778B	30,000 35,000 40,000 45,000	42 36 32 29	0789 0790 0791	20,000 25,000 30,000 40,000	100 80 81 61	0918 0919 0920 0921	3.13 3.25 3.25 3.25	1367 1368 1369 1370	4.12 4.20 4.20 4.20
7,000 7,200 7,500	60 59 57	0214	.94	0383B 0383C 0384	1.70 1.70 1.70	1,500 2,000 2,500 3,000	193 173 158	0779 0780 0781 0781B	50,000 60,000 80,000	26 22 17	0792 0793 0794 0795	50,000 60,000 75,000	49 41 33	$0922 \\ 0923 \\ 0924$	3.36 3.36 3.55	1371 1372	4.30 4.53
8,000 9,000 10,000	55 52 50	0215	.94	0384B 0384C 0385	1.70 1.70 1.70	3,500 4,000	146 136	0782 0782B	100,000	13	0796	100,000			3.75 BLE LU		4.72
12,000 15,000	$\begin{array}{c} 42 \\ 34 \end{array}$	$0216 \\ 0217$	1.00	0386 0387	1.75 1.75	List Pric List Pric List Pric List Pric	e, 1,25 e, 6,00	0 to 5,00 0 to 10,0	0 ohms 00 ohm	s	2.36 2.50	Res. Dia.	elite Kn Stock No.	$\frac{\text{ob}}{\text{List}}$ -Price	Res. Dia.	Driver 'Stock No.	Type List Price
20,000 25,000 40,000 50,000 100,000	26 21 14 12 7	0218 0219 0222 0224 0229	1.00 1.13 1.13 1.30 1.74	0388 0389	1.75 1.89		e, 25,0 e, 45,0 e, 80,0	00 to 40, 00 to 60, 00 ohms	000 ohr 000 ohr	ns	2.92 3.00 3.28	3/4" 11/8"	0359 1959 2159	\$0.30 .40 .40	56" 96" 34" 118"	1058 0358 1958 2158	\$0.20 .20 .25 .25
		For m	ore co	mplete	infor	mation (on OF	MITE	PRO	DUCT	'S, ask	for Oh	mite S	Stock C	Catalog	ζ.	

Popular OHMITE "BROWN DEVIL" RESISTORS



5	Watt-	·1" x	5/16"	Core	Size
Ohms	Mils.	Ohms	Mils.	Ohms	Mils.
1	2,236	125	200	1,250	63
1.5	1,820	150	182	1,500	57
2	1,580	200	158	1,750	53
	1,290	225	149	2,000	49
4	1,120	250	141	2,250	46
5	1,000	300	129	2,500	44
7.5	818	350	120	3,000	39
10	707	400	112	3,500	36
12	645	450	105	4,000	33
15	575	500	100	4,500	31
20	500	600	91	5,000	29
25	447	700	84	6,000	26
30	408	750	81	7,000	24
35	378	800	79	7,500	22
40	0.50	000	e 7	.,000	

100	224 1,200 64					
List	Price, 1 to 1,000 ohms		Ī	_		\$0.53
List	rrice, 1,100 to 5,000 ohms.					.57
List	Price, 6,000 to 10,000 ohms					.61

900

1,000

81 79 74

70

8,000

9,000 10,000 21

353

316 258

35 40

10 W	att—]	13/4" x	5/1	6" Core	Size
Ohms	Mils,	Ohms	Mils.	Ohms	Mils.
1	3,160	350	169	6,000	38
2	2,235	400	158	7,000	34
3	1,825	450	149	7,500	32
4	1,580	500	141	8,000	31
5	1,414	600	129	8,500	29
7.5	1,155	700	119	10,000	26
10	1,000	750	115	11,000	24
12	910	800	111	12,000	23
15	816	900	105	12,500	22
_20	707	1,000	100	13,500	21
25	632	1,100	95	14,300	20
30	575	1,200	91	15,000	19
35	535	1,250	89	16,000	18
40	500	1,500	79	17,500	17
50	447	1,750	74	18,000	17
75	365	2,000	69	20,000	16
100	316	2,250	64	22,500	15
125	283	2,500	63	25,000	14
150	258	3,000	56	*30,000	8
200	223	3,500	51	*35,000	8 7
225	217	4,000	47	*40,000	7
250	200	4,500	45	*45,000	6
300	182	5,000	43	*50,000	6

250	200	4,500	45	*45,000		6
300	182	5,000	43	*50,000)	6
List P	rice, 1 to	1,000 oh	ms			\$0.58
List P	rice, 1,10	0 to 5,00	0 ohm	S		.63
List P	rice, 6,00	0 to 10,0	00 ohr	ng		.72
List P	rice, 11,0	00 to 20,0	000 oh	ms		.80
List P	rice, 22,5	00 & 25,0)00 oh	ms		.86
· List P	rice, 30,0	00 to 50,0	000 oh	ms		.97
*The	units ma	rked with	h an	as te ri s k	are	coat

High quality, small size, wire-wound resistors ideal for voltage dropping, bias units, bleeders, etc. They're extra-sturdy, all-ceramic, vitreous enameled. They give time-proved protection against shock, vibration. heat and humidity. Their long record of continuous trouble-free servicetheir wide use in all climates of the world-prove their complete reliability and economy. All units can be conveniently mounted by means of their 11/2" tinned wire leads. The standard resistance tolerance $\pm 10\%$.

The all-welded construction of the 5 watt unit makes it possible to extend the resistance range to 10,000 ohms, an unusually high value for a vitreous enameled stock unit.

20 Watt-2" x 7/16" Core Size

Mils.	Ohms	Mils.	Ohms.	Mils.
2,000	1,250	126	15,000	30
1,414	1,500	115	20,000	24
894	1,750	107	25,000	20
632	1,850	104	30,000	17
516	2,000	100	35,000	15
447	2,250	94	40,000	14
365	2,400	91	45,000	13
283 258	2,500 2,750 3,000	89 85 81	*55,000 *60,000	12 8.0 8.0
239	3,500	75	*65,000	7.0
223	4.000	70	*70,000	7.0
200 175 169	4,500 5,000	66 63	*75,000 *80,000	7.0 7.0 6.0
163	7,000	53	*90,000	6.0
153	8,000	50	*100,000	6.0
141	10,000	43		6.0
	2,000 1,414 894 632 516 447 365 316 283 258 223 200 175 169	2,000 1,250 1,414 1,500 834 1,750 632 1,850 516 2,000 447 2,250 365 2,400 283 2,750 283 2,750 283 3,000 239 3,500 223 4,000 223 4,000 165 6,000 167 5,000 168 7,500 158 7,500 153 8,000 141 1,000	2,000 1,250 126 1,414 1,500 115 834 1,750 107 632 1,850 104 316 2,000 100 447 2,250 94 365 2,400 91 316 2,500 89 283 2,750 85 258 3,000 81 239 3,500 75 223 4,000 70 200 4,500 66 175 5,000 63 169 6,000 57 163 7,000 53 158 7,500 51 153 8,000 50 141 1,000 43	2,000 1,250 126 15,000 1,414 1,500 115 20,000 834 1,750 107 25,000 632 1,850 104 30,000 100 35,000 447 2,250 94 40,000 365 2,400 91 45,000 365 2,750 85 *65,000 283 2,750 85 *65,000 283 2,750 85 *65,000 258 3,000 75 *65,000 175 5,000 66 *75,000 175 5,000 63 *85,000 175 5,000 63 *85,000 175 5,000 63 *85,000 175 5,000 63 *85,000 175 5,000 63 *85,000 175 5,000 63 *85,000 175 5,000 63 *85,000 175 5,000 63 *85,000 175 153 8,000 50 *100,000 141 1,000 43 115 10,000 43 110,000 115 153 8,000 50 *100,000 115 153 8,000 50 *100,000 115 153 8,000 50 *100,000 115 153 8,000 50 *100,000 115 153 8,000 50 *100,000 *100,000 115 153 8,000 50 *100,000 *100

List Price, 5 to 1,000 ohms	0.75
List Price, 1,200 to 5,000 ohms	.78
List Price, 6,000 to 10,000 ohms	.88
List Price, 12,500 to 20,000 ohms	.94
List Price, 25,000 to 40,000 ohms	1.08
List Price, 45,000 to 60,000 ohms	1.25
List Price, 65,000 to 80,000 ohms	1.46
List Price, 85,000 to 100,000 ohms	1.69
with a low temperature enamel.	

RITEOHM SERIES "84" PRECISION RESISTORS

Ohms	Max. Voltage	Ohms	Max. Voltage	Ohms	Max. Voltage
*0.1	.316	4,000	44.70	.125 Meg.	
0.5	.500	5,000	50.00	.150 Meg.	200
1	.707	7,500	61.20	.175 Meg.	200
10	2.24	10,000	70.70	.200 Meg.	200
25	3.54	12,500	79.00	*.225 Meg.	400
50	5.00	15,000	86.60	*.250 Meg.	400
100	7.07	20,000	100	*.300 Meg.	
200	10.00	22,560	106	*.400 Meg.	400
250	11.20	25,000	112	1.500 Meg.	400
300	12.20	30,000	122	†.600 Meg.	400
500	15.80	40,000	141	1.750 Meg.	400
1000	22.40	50,000	158	t.900 Meg.	400
1500	27.40	60,000	173	†1.0 Meg.	400
2000	31.60	75,000	194	†1.5 Meg.	400
2500	35.40	.1 Meg.	200		-70

Watt Size %6"



High quality, 1% tolerance, 1 watt, non-inductive, piewound units for meter multipliers, lab. equipment,

Ohms	List Price	Ohms	List Price
0.1 to 500	\$1.11	.225 to .25 Meg.	\$3.38
1,000 to 2,500	1.17	.3 megohm	3.71
4,000 to 10,000	1.30	.4 megohm	3.90
12,500 to 15,000	1.43	.5 megohm	4.42
20,000 to 50,000	1.76	.6 megohm	5.53
60,000 to 75,000	2.08	.75 megohm	5.85
.1 megohm	2.41	.9 megohm	6.18
.125 megohm	2.73	1.0 megohm	6.83
15 to .2 megohm	3.06	1.5 megolim	9.75

OHMITE "LITTLE DEVIL" RESISTORS



Ohmite "LITTLE DEVILS" are full 1/2 Watt, 1 Watt and 2 Watt Insulated Composition Resistors and can be used at their full wattage ratings at 70° C. (158° F.) ambient temperature. They meet requirements of specification JAN-R-11. All units are color coded. Each resistor is marked with the resistance value, wattage rating and the Ohmite trade-mark. 'LITTLE DEVILS" are available from stock in $\frac{1}{2}$, 1 and 2 watt sizes with $\pm 10\%$ or $\pm 5\%$ tolerance. The standard RMA values, 10 ohms to 22 megohms can be furnished.

±10% Tolerance — RMA Values

Ohms	Ohms	Ohms	Ohms	Megohms
*2.7	68	1,800	47,000	1.2
· *3.3	82	2,200	56,000	1.5
*3.9	100	2,700	68,000	1.8
*4.7	120	3,300	82,000	2.2
*5.6	150	3,900	0.1 Meg.	2.7
*6.8	180	4,700	0.12 Meg.	3.3
*8.2	220	5,600	0.15 Meg.	3.9
10	270	6,800	0.18 Meg.	4.7
12	330	8,200	0.22 Meg.	5.6
15	390	10,000	0.27 Meg.	6.8
18	470	12,000	0.33 Meg.	8.2
22	560	15.000	0.39 Meg.	10.0
27	680	18,000	0.47 Meg.	12.0
33	820	22,000	0.56 Meg.	15.0
39	1.000	27,000	0.68 Meg.	18.0
47	1.200	33,000	0.82 Meg.	22.0
56	1,500	39,000	1.00 Meg.	

*1 Watt Size Only

Туре	Length		Maximum Volts	List Price
1/2 Watt 1 Watt 2 Watt	3/8"	8 " 3 2 "	350 500 1000	\$0.17 .25 .33

New! 125 "LITTLEDEVILS" IN PLASTIC CABINET



Serviceman's assortment of 125 Ohmite "Little Devil," ½-watt, insulated composition resistors, in the 40 values (10 ohms to 10 megohms) most frequently used by servicemen. The assortment is offered at the price of the resistors alone—the cabinet is furnished without extra cost!

Complete Listings in Bulletin 126 Stock No. CAB-1 Net Price, \$12.50 For more complete information on OHMITE PRODUCTS, ask for Ohmite Stock Catalog.

OHMITE * HESTATS OR SHE'S LES

2 WATT MOLDED COMPOSITION POTENTIOMETER—TYPE AB



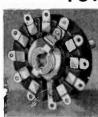
The Type AB Potentiometer is an exceptionally high quality unit designed especially for industrial, laboratory, radio service and other uses where reliability is particularly important. Because the resistor element is molded, the unit

has an exceptionally large safety factor. The power rating of 2 watts is unusual for a unit of such small size. The unit has a very low noise level and low voltage coefficient. It will pass the Army-Navy 200 hour salt spray test, specification AN-QQ-S-91. The unit is 1 1/16" diameter and extends 9/16" behind the panel. The standard shaft length is 2" including the 3/8" long mounting bushing. A SPST switch, to be attached to the back of the control, can be supplied extra.

	Resistance	e Rotation Chara	ecteristics (Taper)
Total Resistance- ±10% Except as Noted	Type U	Type A	Type B
	Linear	Clockwise Log.	Counterclock, Log
	Stock No.	Stock No.	Stock No.
50 Ohms 100 Ohms 250 Ohms 500 Ohms 1,000 Ohms 2,500 Ohms 5,000 Ohms	CU 5001 CU 1011 CU 2511 CU 5011 CU 1021 CU 2521 CU 5021		
10,000 Ohms	CU 1031		CB 1031
25,000 Ohms	CU 2531		CB 2531
50,000 Ohms	CU 5031		CB 5031
.10 Meg.	CU 1041	CA 1041	
.25 Meg.	CU 2541	CA 2541	
.5 Meg.	CU 5041	CA 5041	
1.0 Meg. ±20%	CU 1052	CA 1052	
2.5 Meg. ±20%	CU 2552	CA 2552	
5.0 Meg. ±20%	CU 5052	-	

Type AB Potentiometer List Price \$3.00
Stock No. CS-1, Switch only for above unit (supplied unmounted) List Price .90

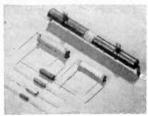
NON-SHORTING TYPE ROTARY POWER TAP SWITCH



Single-pole, multi-position switch with all-ceramic insulation, silverto-silver contacts and "slow-break" action designed especially for alternating current. Switch shaft is electrically "dead". A.C. rating 10 amps., 150 volts. Diameter 13/4"—Depth behind panel 11/8"—Shaft diameter 1/4"—Recommended knob, stock number 4500 (round type) or 4516 (bar type).

Number of Taps	Total Rotation	Stock Number	List Price Less Knob
11	300°	111-11	3.90
10	270°	111-10	3.77
9	240°	111-9	3.77
8	210°	111-8	3.64
7	180°	111- 7	3.64
6	150°	111-6	3.51
5	120°	111-5	3.51
4	90°	111-4	3.38
3	60°	111-3	3.38
2	30°	111-2	3.38

OHMITE R.F. PLATE CHOKES



The new series of seven Ohmite single layer wound solenoid radio frequency plate chokes covers the entire frequency range of 3 to 520 megacycles. The new chokes replace the former series of chokes, Z-0, Z-1, Z-2, and Z-3 with units that accomplish

the same results but are much smaller in physical size with one exception, the new Z-7 choke, which is identical to the former Z-3, the number only having been changed.

The four highest frequency chokes are wound on low power factor plastic cores while the other three units are wound on steatite tubes. Windings are insulated and protected by a moisture-proof coating. The single layer winding is designed to avoid adverse harmonic effects within the recommended operating range and also prevents breakdown from high r.f. potentials.

Stock Number	Operating Range Megacycles	Micro- henries	Core Dimension	List Price
Z-7	3 to 20 Mc.	84.0	6" x 916"	\$1.56
Z-14	7 to 35 Mc.	44.0	2" x 1/16"	.68
Z-28	20 to 60 Mc.	21.0	1 3/4" x 5/6"	.44
Z-50	35 to 110 Mc.	7.0	7/8" x 9/2"	.33
Z-144	80 to 200 Mc.	1.8	84" x 3/6"	.33
Z-235	160 to 350 Mc.	0.84	34" x 3/6"	.33
Z-460	320 to 520 Mc.	0.20	1/2" x 5/2"	.33

Non-magnetic Brackets Furnished with Z-7. All chokes 1000 ma. rating except Z-14 and Z-28. These are rated at 600 ma.

OHMITE POWER LINE CHOKES



Prevents high-frequency currents of radio transmitters, diathermy and therapeutic equipment from going out over the power lines and interfering with nearby radio receiving sets. Used as a filter in connection with two grounding condensers of 0.1 microfarad capacity each. The Z-20 Choke is also used at radio receivers to keep out interference. All chokes consist of two single-layer windings on a single ceramic core—insulated and protected by moisture-proof coating. Recommended for use in suppressing radio (not audio) frequency interference.

Stock No.	Micro- henries	Current Rating	Total D.C. Resistance Ohms	Lgth.	Tube Dia.	List Price
Z-20	14	5 Amperes	0.15	4"	18"	\$2.15
Z-21	15	10 Amperes	0.07	61/2"	3/4 "	3.58
Z-22	18	20 Amperes	0.045	81/2"	1 1/8 "	5.20

NEW OHM'S LAW CALCULATOR



Solves Ohm's Law problems with only one setting of the slide. No decimal points to cause confusion—all values are direct reading. Requires no slide rule knowledge.

Ohmite Ohm's Law Calculator....NET Price \$0.25

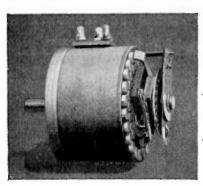
For more complete information on OHMITE PRODUCTS, ask for Ohmite Stock Catalog.

RESISTORS
VARIABLE
ATTENUATORS
SWITCHES

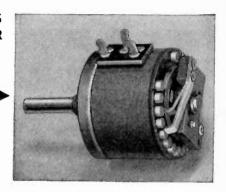
SHALLCROSS MANUFACTURING CO.

COLLINGDALE, PENNSYLVANIA

SHALLCROSS AUDIO ATTENUATORS



SHALLCROSS ATTENUATOR NO. 420-2B2 SHALLCROSS ATTENUATOR NO. C720-2A3



These Shallcross Features Mean J BETTER PERFORMANCE J BIGGER VALUE

- ✓ Off position attenuation well in excess of 100 db.
- √ 25% to 50% fewer soldered joints.
- ✓ Noise level ratings that are factual. (130 db or more below zero level).

✓ Non-inductive Shallcross precision resistors used throughout assure flat attenuation to and beyond 30 kc.

√ Types and sizes engineered for all needs. Attenuation accuracies of 1%, resistor accuracies of 0.1%, on special order.

Shallcross Audio Attenuators are available in either variable or fixed units, the former often being referred to as a "control" and the latter, as a "pad".

Controls are available with as few as 5 steps or as many as 52 steps with an attenuation as small as 0.1 db per step. The total attenuation for a single control does not exceed about 125 db since such high attenuation approaches the noise level of the switching mechanism,

The complete story of Shallcross attenuators may be found in Shallcross Engineering Bulletin #4, copies of which are available on request. Specifications and prices are given below for a few of the most popular variable attenuators.

IMPEDANCE: 150, 500, 250/500, 600 ohms, except potentiometers, which are 100,000 and 250,000 ohms.

RESISTORS: All non-inductively wirewound, $\pm 5\%$ tolerance, except types preceded with "C", which are composition selected to $\pm 5\%$.

ATTENUATION: Increases for counter-clockwise rotation of knob end of shaft.

FREQUENCY RESPONSE: Flat over entire audio range.

SWITCH MECHANISM: Multi-leaf wiper arms collector rings and contacts available in tarnish resistant silver alloy or brass. Noise level -130 db.

DETENT: Indexing mechanism available on any unit for \$0.50 list. Back of panel depth is then increased 5/16'',

DIALS: \$1.00 list each additional.

KNOBS (VA-16906): \$0.50 list each additional.

120-2A3 \$8.00 silver 7.00 brass Ladder attenuator, 20 steps, 2 db per step, tapered on last 3 steps to off. MOUNTING: single hole, \\\%"-32 threaded bushing or two hole, 6-32 screws, 1\\\%" centers. DIMENSIONS: 1\\\%" diameter, 1\\\%" back of panel depth. CONTACT SPACING: 15°.

C720-2A3 \$8.00 silver 7.00 brass Potentiometer, 20 steps, 2 db per step, tapered on last 3 steps to off. MOUNTING: single hole, %".32 threaded bushing or two hole, 6.32 screws, 1\%" centers. DIMENSIONS: 1\%" diameter, 1\%" back of panel depth. CONTACT SPACING: 15°.

132-1.5B3 \$13.50 silver 12.00 brass

430-1C1 \$21.00 silver 19.00 brass

432-1.5C3 \$21.00 silver 19.00 brass

420-2B2 \$16.00 silver 14.00 brass

C820-2B2 \$16.00 silver 14.00 brass Ladder attenuator, 32 steps, 1.5 db per step, tapered on last 3 steps to off. MOUNTING: two hole, 6-32 or 8-32 screws, 11/4" or 11/2" centers. DIMENSIONS: 21/4" diameter, 13/4" back of panel depth. CONTACT SPACING: 10°.

Bridged T attenuator, 30 steps, 1 db. per step, 30 db total. MOUNTING: two hole, 6-32 or 8-32 screws, 114" or 11/2" centers. DIMENSIONS: 21/2" diameter, 13/4" back of panel depth. CONTACT SPACING: 111/4°.

Bridged T attenuator, 32 steps, 1.5 db per step, tapered on last 5 steps to off. MOUNTING: two hole, 6-32 or 8-32 screws, 11/4" or 11/2" centers. DIMENSIONS: 21/4" diameter, 2-5/16" back of panel depth, CONTACT SPACING: 10°.

Bridged T attenuator, 20 steps, 2 db per step, attenuation linear with off on last step. MOUNTING: two hole, 8-32 or 6-32 screws, 1½" or 1½" centers. DIMENSIONS: 2½" diameter, 1¾" back of panel depth. CONTACT SPACING: 15°.

Dual potentiometer, each section 20 steps, 2 db per step, attenuation linear with off on last step. MOUNT-ING: two hole, 6-32 or 8-32 screws, 11/4" or 11/2" centers. DIMENSIONS: 21/4" diameter, 13/4" back of panel depth. CONTACT SPACING: 15.°.

SHALLCROSS V.U. METER RANGE EXTENDING ATTENUATORS

IMPEDANCE: Available with input impedances of 3900-7100-7500 ohms. Output impedance is 3900 ohms to match Weston Type 30B or General Electric Type DO 61 V.U. meters.

TOLERANCE: ±1% except "C" types which are ±5%.

INSERTION LOSS: Zero.

DETENT: All units supplied with indexing mechanism; back of panel depth includes detent.

C35-4A4 \$12.00 silver 11.00 brass T attenuator, +4 to +24 V.U., 5 steps, 4 V.U. per step. MOUNTING: single hole, 3/2-32 threaded bushing. DIMENSIONS: 13/4" diameter, 2-1/16" back of panel depth. CONTACT SPACING: 302

C35-4A5 \$12.00 silver 11.00 brass T attenuator, +4 to +20 V.U. and OFF, 5 steps, 4 V.U. per step. MOUNTING: single hole, 3%"-32 threaded bushing. DIMENSIONS: 13%" diameter, 2-1/16" back of panel depth. CONTACT SPACING: 30°.

320-2C4 \$21.50 silver 20.50 brass T attenuator, +4 to +44 V.U., 20 steps, 2 V.U. per step. MOUNTING: two hole, 8-32 screws, 1½" centers. DIMENSIONS: 2½" diameter, 2-1/16" back of panel depth. CONTACT SPACING: 15°.

320-2C5 \$21.50 silver 20.50 brass T attenuator, +4 to +42 V.U. and OFF, 20 steps, 2 V.U. per step. MOUNTING: two hole, 8-32 screws, 1½" centers. DIMENSIONS: 2½" diameter, 2-1/16" back of panel depth. CONTACT SPACING: 15°

412-2B4 \$16.50 silver 14.50 brass Bridged T attenuator, +4 to +28 V.U., 12 steps, 2 V.U. per step. MOUNTING: two hole, 8-32 screws, 1\frac{1}{2}" centers. DIMENSIONS: 2\frac{1}{2}" diameter, 2-1/16" back of panel depth. CONTACT SPACING: 12°.

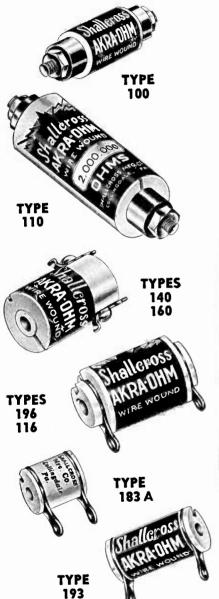
412-2B5 \$16.50 silver 14.50 brass Bridged T attenuator, +4 to +26 V.U. and OFF, 12 steps, 2 V.U. per step. MOUNTING: two hole, 8-32 screws, 1½" centers. DIMENSIONS: 2½" diameter, 2-1/16" back of panel depth. CONTACT SPACING: 12°.

SHALLCROSS MANUFACTURING CO.

COLLINGDALE, PENNSYLVANIA

ELECTRICAL INSTRUMENTS RESISTORS VARIABLE **ATTENUATORS SWITCHES**

SHALLCROSS AKRA-OHM RESISTORS



LIST PRICES—Standard BX Types, $\pm 1\%$ Tolerance

\$2.15 2.30 2.40 2.50 2.60 2.70 2.90 3.20 3.35	\$1.65 1.75 1.85 1.85 2.00 2.00	\$1.00 1.05 1.15 1.25	\$1.40 1.50
2.30 2.40 2.50 2.60 2.70 2.90 3.20	1.75 1.85 1.85 2.00	1.05 1.15	1.50
2.40 2.50 2.60 2.70 2.90 3.20	1.85 1.85 2.00	1.15	1
2.50 2.60 2.70 2.90 3.20	1.85 2.00		
2.60 2.70 2.90 3.20	2.00	1.25	1.60
2.70 2.90 3.20			1.60
2.90 3.20	2.00	1.40	1.75
3.20		1.55	1.75
	2.25	1.75	2.00
3.35	2.50	2.00	2.25
	2.60	2.15	2.35
3.55	2.75	2.15	2.50
3.85	3.05	2.40	2.75
4.15	3.35	2.65	3.00
4.45	3.65	2.90	3,25
5.10	4.20	3.15	3.75
5.70	4.75	3.65	4.25
6.00	5.05	4.40	4.50
6.15	5.20	4.50	4.60
6.35	5.40	4.65	4.75
6.65	5.70	4.90	5,00
6.95	6.00	\$.15	5.25
9.80	8.25		
14.15	11.25		
16.40	14.00		
18.40	16.75		
22,40	21.25		
26.40	25,75		ļ
30.40	CDE	CIAL TOLER	ANCE
35.40			
40.40			•
45.40		r prices, Add	to list prices as
50.40		07	/10.07 11.05.07
,			10%, add 25% 5%, add 50%
			5 %, and 50 %
will be furnished u		Type 110, 116	6 & 160 \$.40
will be furnished used following price red for resistors furnis	uctions will	Type 110, 116 " 196 " 183	6 & 160 \$.40 .25 .15
	6.00 6.15 6.35 6.65 6.95 9.80 14.15 16.40 22.40 22.40 26.40 30.40 35.40 40.40 45.40 50.40	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	6.00 5.05 4.40 6.15 5.20 4.50 6.35 5.40 4.65 6.65 5.70 4.90 6.95 6.00 5.15 9.80 8.25 14.15 11.25 16.40 14.00 18.40 16.75 22.40 21.25 26.40 25.75 30.40 SPECIAL TOLERA Resistors to closer tolerance plied at higher prices. Add follows: ±½%, add 5% ±1/2%,

Prices shown are for Manganin Wire used in resistances to 1,000 ohms and for Nickel-Chromium-Iron Wire used in resistances above 1,000 ohms,

TYPES BX183A AND BX193-±1% IN COMMON VALUES-IN STOCK

In addition to the popular standard types listed here, Shalleross Akra-Ohm Resistors are made in a complete line of standard and special designs for precise electronic equipment demanding great stability and long life even under difficult conditions of temperature and humidity.

Shallcross achievements include the development of really practical hermetically-sealed units; BX processed resistors "tropicalized" against moisture and fungus; the use of spun glass insulated wire for applications where considerable power nunt be dissipated; bifilar wound resistors, 1000 ohms or less, for exacting instrument use; heavy-duty surge resistors; accurate heavy-duty power resistors, and various others. Write for the Shallcross "Engineering Data" wall and file Chart.

ACCURATE FIXED WIRE-WOUND TYPES (JAN R93) PRICES ON REQUEST.

Shallcross Type	** JAN Style	Wattage	* Maximum Ohms	Std. Terminal	Mounting	Dimensions Length—Diam
100	RB21	1	750,000	#8 screw	5 amp. fuse clip	2 1/16" x 9/16"
110	RB22	2	2 Meg.	#8 screw	5 amp. fuse clip	278" x 34"
116	RB14	1	2 Meg.	Solder lugs	#6 screw	25/32" x 3 4"
140	RB41	0.5	350,000	Solder lugs	#6 screw	11/4" x 11/16"
160	RB42	1	500,000	Solder lugs	#6 screw	1 9/16" x 11/1
183A	RB11	0.5	300,000	So der lugs	#6 screw	58" x 1/2"
193	RB12	1	400,000	Solder lugs	#6 screw	1" x ½"
196	RB13	1	1 Meg.	Solder lugs	#6 screw	11/4" x 3/4"
△1196	RB13	1	1 Meg.	Solder lugs	#6 screw	11/4" x 7/4"

*Based on use of .0014" diameter nickel chromium wire.
**JAN style refers to Joint Army-Navy Specification R93.

\[\text{Mermetically sealed.} \]
Other sizes available.

Smaller wire sizes will greatly increase maximum allowable resistance on any form, Price depends on wire size and specification.

SEND FOR RESISTOR ENGINEERING CHART FOR COMPLETE DATA

SHALLCROSS MANUFACTURING CO. COLLINGDALE, PENNSYLVANIA

ELECTRICAL INSTRUMENTS RESISTORS VARIABLE ATTENUATORS SWITCHES

SHALLCROSS DECADE RESISTANCE BOXES

The large assortment and wide range of resistance available makes the Shallcross line of Resistance Boxes unique in the instrument

field. They are used extensively as laboratory standards, AC and DC Bridge and ratio arms, voltage dividers, etc.

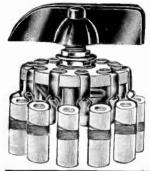
Accuracy adjustment of Resistors as follows: 1% 1. ohm.... 0.25% all others.....

0.1%

						0.20 /6	arr on		0.1/0
No.	No. Dials	Ohm Steps	Ohms Total Resistance	Price	No.	No. Dials	Ohm Steps	Ohms Total Resistance	Price
543	1	0.1	1	\$13.50	821	3	10	11,100	\$39.50
544	1	1.0	10	13.50		3	100	111.000	11.50
545	1	10	100	13.50		3	1.000	1,110,000	58.00
546	1	100	1,000	13.50		3	10,000	11,100,000	91.00
517	1	1,000	10.000	16.50	825	4	1	11,110	51.00
548	1	10,000	100,000	19.50	826	4	10	111,100	56,00
549	1	100,000	1.000,000	27.00		4 1	100	1.111.000	69.50
550	1	1,000,000	10.000,000	50.00	828	4	1,000	11,110,000	105.50
817	- 3	.01	11.1	45.00	8285	5	0.1	11.111	62.50
817A	4	.01	111.1	56.50	829	5	i	111.110	67.50
817B	5	.01	1,111.1	71.00	830	5	10	1.111.100	81.00
818	3	1.0	111	86.50	831	5	100	11.111.000	117.00
819	4	0.1	1,111	48.00	832	6	1	1.111.110	91.50
820	3	I	1.110	36.50		6	10	11.111.100	127.50



UNMOUNTED DECADE RESISTANCES



In response to a demand from engineers, manufacturers and physicists who design and construct their own electrical measuring instruments, we have made the Shallcross Unmounted Decade Resistances available. They are of the same construction as those used in the popular Shallcross Resistance Decades described above and consist of ten Shallcross Resistors mounted on a ceramic instrument switch.

SPECIFICATIONS

Type No.	Total Resistance Ohms	Unit Resistance Ohms	Switch No.	Accuracy	Price
435	1.0	.1	536	1.0%	89.00
436	10	1.0	531	0.25%	9.00
437	100	10	531	0.1	9.00
438	1,000	100	531	0.1	9.00
439	10.000	1.000	531	0.1	12.00
440	100,000	10.000	531	0.1	14.00
441	1 Meg.	100,000	531	0.1	22.50
142	10 Meg.	1 Meg.	531	0.1	45.00

Mounting: Single 38" Hole Mounting-Panels Up to 3/16" Thick. Any of the above may be obtained with aluminum dust cover and shield at \$1.50 additional cost.

SHALLCROSS AKRA-OHM PRECISION RESISTORS for "Miniaturization" applications

UNUSUAL ACCURACY IN SMALL SPACE

These new Shallcross Okra-Ohm Wire-Wound Precision Resistors have been designed to meet the needs of modern, miniature equipment. Standard tolerance is 1%. Closer tolerances can be furnished on special order.

The units offer unusually high and accurate resistance values in small space and are light enough to be suspended by their own tinned copper leads, or may be secured with mounting screw.

Туре	Sections	Size	Watts	Resistance per section Ohms	Resistance per section Ohms
136	1	18 %" x 1/4"	0.25	150,000	1.
137	2	18 ½" x ¼" 45 ¼" x ¼"	0.25	150.000	1.
133	3	14/2" x 3/8"	0.25	550,000	1.
134	4	1 1/4" x 3/8"	0.25	375.000	1.
	-	Prices on a	policatio	on.	



SHALLCROSS ROTARY SELECTOR SWITCHES

Like other Shallcross instrument components, these Rotary Selector Switches are designed to cover a very wide field of application in both shorting and nonshorting types, and can be modified to

control a variety of circuits. Details on any type for practically any application on request. Suffixes B and S denote Brass and Silver contacts and contact arms.

SWITCH PRICES

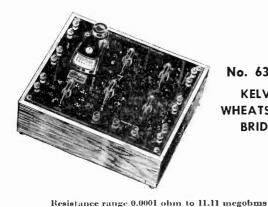
Poles	Positions	Contact Plate Material	Shorting	Non-Shorting	List Price
1	11	Steatite	4605-B	4610-B	\$3.10
2	11	Steatite	4620-B	4615-B	6.95
$\frac{2}{1}$	11	Steatite	4605-S	4610-S	3.40
2	11	Steatite	4620-S	4615-S	7.55
1	12	Bakelite	5550-B	5620-B	3.60
1	12	Bakelite	5550-S	5620-S	3.90
1	15	Steatite	5610-B	4225-B	4.00
2 I	15	Steatite	5615-B	4980-B	7.45
I	15	Steatite	5610-S	4225-S	4.50
2	15	Steatite	5615-S	4980-S	8.45
1	18	Bakelite	5155-B	5625-B	4.85
1	18	Bakelite	5155-S	5625-S	5.40
1	24	Bakelite	5630-B	5570-B	6.20
1	24	Bakelite	5630-S	5570-S	6.80
1	36	Bakelite	4815-B	4850-B	*
1	36	Bakelite	4815-S	4850-S	*
	48	Bakelite	4640-B		*
1	48	Bak elite	4640-S		
1	60	Bakelite	}	59 35 -B	
1	60	Bakelite		5935-S	. *
		tating Tap Sv 2240-2 Shorti		rass Contacts—	*
		* Prices on	application	n.	

ELECTRICAL INSTRUMENTS RESISTORS VARIABLE ATTENUATORS **SWITCHES**

SHALLCROSS MANUFACTURING CO.

COLLINGDALE, PENNSYLVANIA

SHALLCROSS D-C BRIDGES



No. 638-2-4 KELVIN WHEATSTONE **BRIDGE**

No. 630 WHEATSTONE **BRIDGE**



Resistance range from 0.1 ohm to 11.1 megohms

SPECIFICATIONS

 $\mathbf{ACCURACY}{-0.3\%}$ between 1.0 ohm and .1111 megohms. Below and above this range—2 % .

GALVANOMETER-Built-in-sensitivity | micro-ampere per millimeter

RHEOSTAT ARM—Four decades—1.0 ohm steps in Wheatstone and 1.0 micro-ohm steps in Kelvin ranges.

RESISTANCE BOX-Binding posts allow using rheostat as Resistance Box

SEPARATE KEYS-Provided for battery and galvanometer circuits. ${\bf CASE-}{\bf Carrying~type~with~removable~cover~(not~illustrated)~and~compartment~for~41\%~volt~battery~(not~supplied)~for~Wheatstone~range}$ measurements.

DIMENSIONS—Length 1214", width 101/8", height 61/2".

WEIGHT-Approx. 9 lbs. Price \$195.00.

SPECIFICATIONS

ACCURACY-1.0% between 10 ohms and 1.0 megohm-2% over 1 megohm.
COMPONENT RESISTORS-0.1% accurate except 1 ohm, which

are 0.25%.
RHEOSTAT ARM—Three decades—variable in 10.0 ohm steps.
RESISTANCE BOX—Binding posts allow using rheostat as Resist-

ance Box.
CAM SWITCH—Provided for battery and galvanometer circuits.
CASE—Carrying type with removable cover and compartment for batteries and leads (not supplied).

DIMENSIONS-Length 10", width 9\%4", height 5\\\4".

WEIGHT-Approx. 6_lbs. Price \$110.00.



No. 637 **KELVIN** WHEATSTONE **BRIDGE**

Resistance range 0.001 ohm to 11.1 megohms

SPECIFICATIONS—Same as No. 638-2 except:

ACCURACY-1.0% between 1.0 ohm and 1.0 megohm; 2.0% above 1.0 megohm; and 3.0% below 0.1 ohm.

GALVANOMETER-Sensitivity 1.0 micro-ampere per millimeter division. Built-in.

RHEOSTAT ARM—Three decades—10 ohm steps in Wheatstone and 10 micro-ohm steps in Kelvin ranges.

CANNOT be used as Resistance Box.

DIMENSIONS-Length 10", width 9%4", height 51/4".

WEIGHT-Approx. 7 lbs. Price \$140.00.

No. 629 **FAULT** LOCATION BRIDGE



Resistance range 0.1 ohm to 11.11 megohms

SPECIFICATIONS

ACCURACY—COMPONENT RESISTORS—0.1% accurate except 1.0 ohm, which are 0.25%. GALVANOMETER—Built-in—sensitivity 1.0 micro-ampere per mm.

RHEOSTAT ARM—Four decades—H.110 ohms—variable in 1 ohm

Steps.

RATIO DIAL—Marked 0.001, 0.01, 0.1, 1.0, 10.0, 100 and 1000 for resistance measurements and Varley tests. MI, M 10, M 100 and M 1000 for Murray tests.

SEPARATE KEYS—Provided for battery and galvanometer circuits. CASE—Carrying type with removable cover, concealed compartment for 1½ volt battery (not supplied).

BINDING POSTS—Provided for use of external galvanometer where remired.

DIMENSIONS-Length 103/8", width 85/8", height 55/8".

WEIGHT-Approx. 7 lbs. Price \$130.00.

VOLTAGE DIVIDERS (DECADE POTENTIOMETERS)

No.	Dials	Total Resistance	Price	No.	Dials	Total Resistance	Price
835	4	10,000 ohms	\$100.00	845	3	1,000 ohms	\$74.00
836	4	100,000 ohms	110.00	846	3	10,000 ohms	79.50
837	4	1,000 ohms	95.00	850	3	100,000 ohms	92.50



WARD LEONARD · VITROHM RESISTORS and RHEOSTATS and RHEOSTATS

VITROHM RING TYPE RHEOSTATS



The core and base of Ward Leonard Ring Type Rheostats are made of the highest grade ceramic materials. The resistance wire is wound toroidally on the core, and is coated with a tough, heat resistant, acid resistant, crazeless vitreous enamel.

The contact is a special alloy and is of large area to avoid sticking,

pitting, local heating, or oxidation when setting remains fixed for a long period of time.

Watt Ratings

Based on continuous operation in free air with a temperature rise not to exceed 300° C, which is within the limits specified by Underwriters' Laboratories and NEMA.

25	W	AT.	rs
Ту	pe	25	R

Ohms 0.5

500 750 1000

1500

3500

Current

7070 5000 3540

2880 1770

1280

707 574

158 128

Dimer	nsions
A	1 1/6
В —	13/6"
C	1 "
D -	11/8"

Approx No. of

90 90

103 108

137 171 171

240 274 308

308 390 376

520 520

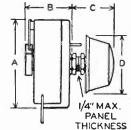
50	WATTS	Dimension A — 25/6
Ту	pe 50R	B — 15/6 C — 11/8 D — 11/6

- 78	B - 172						
List Price	Ohms	Current m. a.	Approx. No. of Steps	List Price			
\$5.85 5.85 5.20 5.85 6.85	0.5 1 2 4 6 8 10 15 25 35 50 75 100 2500 750 1000 1500 2500 7500 7500 7500 7500	10000 7070 5000 3540 2880 2230 2230 1810 1415 1190 812 707 574 447 374 374 374 316 223 181 1190 812 707	30 49 49 59 108 113 150 150 150 188 119 188 225 225 300 338 375 450 450 450 570 570 570 570 570 570 570 570 570 5	\$6.50 6.50 6.50 5.85 5.85 5.85 5.85 5.85 5.85 5.85 5			

Number of Steps

Each turn of resistance wire on the core of a Vitrohm Ring Type Rheostat constitutes a step of change in the resistance value.

Vitrohm Ring Type Rheostats are made with three terminals with no "off" position, and can be used as potentiometers or rheostats, as desired. Rheostats with an "off" position can be furnished on special order.



Heavy Duty Rheostats Pressed steel plate type.

300 watts -1 to 2500 ohms, 20 steps, 6" diameter. 500 watts — 1 to 5000 ohms, 33 steps, 8" diameter.

100 WATTS Dimensions Type 100R

150 WATTS Dimensions

Ohms	Current m. a.	Approx, No. of Steps	List Price	Ohms	Current m. a.	Approx, No. of Steps	List Price
0.5	14100	41	\$9.75	0,5	17320	43	\$12.35
1	10000	41	9.75	1	12240	43	12.35
2	7070	41	9.75	2	8660	43	12.35
2 3 5	5740	72	9.75	3	7070	54	12,35
5	4470	82	9.75	5	5470	107	12.35
7.5	3640	82	9.10	2 3 5 7.5	4470	107	12,35
16	3160	72	9.10	10	3870	107	11,70
15	2560	156	9.10	15	3160	107	11.70
25	2000	196	9.10	25	2440	204	11.70
50	1415	274	9.10	. 50	1730	245	11.70
75	1150	313	9.10	75	1415	286	11.70
100	1000	274	9.10	100	1224	367	11.70
200	707	313	9.10	200	866	326	11.70
300	574	353	9.10	300	707	408	11.70
400	500	392	9.10	400	612	408	11.70
500	447	392	9.10	500	547	489	11.70
750	364	464	9.10	750	447	489	12,35
1000	316	470	9.75	1000	387	620	12.35
2000	223	595	9.75	2000	273	775	13.00
2500	200	744	9.75	2500	244	775	13.00
5000	141	893	10.40	5000	173	930	13.65
7500	115	893	11.05	7500	141	1240	14,30
10000	100	1041	11.70	10000	122	1240	15.60

VITROHM PLAQUE RESISTORS



Vitrohm Plaque Resistors are flat in form. The resistance wire is arranged on a rectangular ceramic base to give the lowest obtainable values of inductance and distributed capacitance. Inductance at frequencies up to 1000 kilocycles and distributed capacitance up to 5 megacycles are so low in value that they are negligible.

Vitrohm Plaque Resistors are rated 20, 40, and 125 watts with full ventilation. Since full

ventilation is usually impossible to attain, the watt rating should be decreased to compensate for the reduction in ventilation. A single plaque resistor mounted on a panel should operate safely about 80% of the full watt rating.

Copyright by U. C. P., Inc.

20 WATTS	40 WATTS	125 WATTS
TYPE 20P	TYPE 40P	TYPE 125P

Ohms	Current m. a.	List Price	Current m. a.	List Price	Current m. a.	List Price
0.64	5590	\$1.95	7910	\$2.80	14000	\$3.90
1.00	4470	1.95	6320	2.60	11200	3.90
1.6	3540	1.95	5000	2.60	8800	3.90
2.5	2830	1.95	4000	2.60	7050	3.90
4.0	2240	1.95	3160	2.80	5600	3.90
6.4	1770	1,95	2500	2.60	4400	3.90
10	1415	1.95	2000	2.60	3500	3.90
16	1120	1.95	1580	2.60	2800	3.90
25	895	1.95	1260	2.60	2200	3.90
40	705	1.95	1000	2.80	1770	3.90
50	630	1.95	895	2.60	1580	3.90
64	560	1.95	790	2.60	1400	3.90
100	445	1.95	630	2.60	1120	3.90
160	355	1.95	500	2.60	880	3.90
250	285	1.95	400	2.60	705	3.90
400	225	1.95	315	2.60	560	3.90
640	175	1,95	250	2.60	440	3.90
1,000	140	1.95	200	2.80	350	3.90
1,600	110	1.95	160	2.60	280	3.90
2,500	90	1.95	125	2.60	220	3.90
4,000	70	1,95	100	2.60	177	3,90
5,000	65	1.95	90	2.60	158	3.90
6,400 0,000			80 65	2.80 2.60	140 112	3,90 3,90



WARD LEONARD · VITROHM RESISTORS

VITROHM FIXED RESISTORS

5 WATTS

Type 5F

Size 1	" X	5/16"	No	Mounting	Brackets

Ohms	Current m. a.	List Price	Ohms	Current m. a.	List Price
1	2230	\$0.52	350	119	\$0.52
1.5	1820	.52	400	112	.52
	1580	.52	450	105	.52
2 3 4 5	1290	.52	500	100	.52
4	1117	.52	600	91	.52
5	1000	.52	700	84	.52
7.5	811	.52	750	81	.52
10	707	.52	800	79	.52
12	644	.52	900	74	.52
15	577	.52	1000	70	.52
20	500	.52	1100	67	.52
25	450	.52	1200	64	.52 .52
30	408	.52	1250	63	.52
35	378	.52	1500	57	.52
40	353	.52	1750	53	.52
50	316	.52	2000	50	.52
75	257	.52	2250	47	.52
100	223	.52	2500	45	.52
125	200	.52	3000	40	.52 .52
150	182	.52	3500	37	.52
200	158	.52	4000	35	.52
250	141	.52	4500	33	.52
300	129	.52	5000	31	.52

20 WATTS

Type 20F

Size 2" x 1/4" No Mounting Brackets

Ohms	Current m. a.	List Price	Ohms	Current m. a.	List Price
1	4480	\$0.91	2500	90	\$0.91
3	2580	.91	2750	85	.91
5	2000	.91	3000	80	.91
10	1410	.91	3500	76	.91
15	1150	.91	4000	70	.91
25	900	.91	4500	67	.91
50	630	.91	5000	63	.91
75	510	.91	6000	55	.91
100	450	.91	7000	53	.91
150	365	.91	7500	51	.91
175	340	.91	8000	50	.91
200	320	.91	10000	40	.91
250	285	.91	12500	32	.91
300	258	.91	15000	27	.91
350	240	.91	20000	20	1.11
400	220	.91	25000	16	1.11
500	200	.91	30000	13	1.11
650	175	.91	35000	11	1.11
700	169	.91	40000	10	1.11
750	160	.91	45000	9 8	1.11
800	155	.91	50000	7	1.11 1.43
850	153 141	.91 .91	55000 60000*	10.8	1.43
1000 1200	130	.91	65000*	10.5	1.43
1250	125	.91	70000*	10.0	1.43
1500	115	.91	75000*	9.5	1.43
1750	107	.91	80000*	9.3	1.43
1850	104	.91	85000*	9.1	1.43
2000	100	.91	90000*	8.8	1.43
2250	94	.91	95000*	8.6	1.43
2400	91	.91	100000*	8.4	1.43
			perature.		7 Watts

Type 100F Size 61/7 v 11/7 Mounting Contact 71/1

Ohms	Current m. a.	List Price	Ohms	Current m. a.	List Price
1	10000	\$2,15	2500	200	\$2.15
2	7070	2,15	3000	180	2.15
3	5770	2,15	3500	170	2,15
4	5000	2.15	4000	160	2.15
5	4470	2,15	4500	150	2.15
10	3160	2.15	5000	141	2.15
25	2000	2.15	7500	115	2.54
50	1410	2.15	10000	100	2.54
.75	1150	2.15	15000	80	2.54
100	1000	2.15	20000	70	2.54
125	895	2.15	25000	60	2.54
150	815	2.15	30000	50	2,86
250	630	2.15	35000	43	2.86
500	447	2.15	40000	37	2.86
750	365	2.15	50000	30	2.88
1000	316	2.15	60000	25	3.25
1250	285	2.15	70000	21	3.25
1500	260	2.15	75000	20	3.25
2000	225	2.15	100000	15	3.58

5-watt, 10-watt,

Types 5F, 10F, and 20F are furnished with wire terminal leads - no brackets.

Order by Type Number and Resistance Value.

20-watt

HEAVY DUTY R

Mounting brackets and lug type



25 WATTS

Type 25F

Size-2" x 5/8" Mounting Centers-25/8"

		•			
Ohms	Current m. a.	List Price	Ohms	Current m. a.	List Price
0hms 1 2 3 4 5 10 15 50 75 100 150 200 250 300 400 500 750			2000 2500 3000 3500 4000 5000 6000 15000 12000 20000 25000 35000 40000		\$1.04 1.04 1.04 1.04 1.04 1.17 1.17 1.17 1.17 1.17 1.43 1.43 1.43 1.43
800 850 1000 1250 1500	177 170 158 140 129	1.04 1.04 1.04 1.04 1.04	70000 70000 75000 80000 100000	6.7 5.7 5.3 5	1.63 1.76 1.95 1.95 2.47

160 WATTS

Type 160F

Size-81/2" x 11/8" Mounting Centers-91/4" Current List m.a. Price List Current Ohms Ohms m. a. 2500 3000 3500 12650 8940 7300 \$3.77 3.45 3.25 252 230 215 \$2.86 2.86 2.86 3 4 5 10 15 25 50 75 100 200 250 750 1000 1500 2000 4000 4500 5000 200 185 178 146 126 2.86 2.86 3.06 2.86 2.86 2.86 2.86 2.86 2.86 2.86 5650 4000 3265 2525 2.86 7500 10000 2.86 2.86 1785 1460 1265 1035 15000 20000 25000 2.86 2.86 2.86 30000 35000 40000 894 800 565 3.45 50000 60000 75000 80000 100000 2.86 2.86 2.86 3.45 3.90 3.90 460 400 326 2.86 2.86 3.90

10 WATTS

Type 10F

Size-134" x 5/6" No Mounting Brackets

Wire wound resistors, sturdy construction, using low tempera-ture coefficient materials. Coated with Ward Leonard's own crazeless Green Enamel.

Ohms	Current m. a.	List Price	Ohms	Current m. a.	List Price	Ohms	Current m. a.	List Price
1	3160	\$0,59	150	258	\$0.59	4500	47	\$0.59
1.5	2580	. ,59	200	224	.59	5000	45	.59
2	2235	.59	225	211	.59	6000	41	.59
3	1825	.59	250	200	.59	7000	38	.59
2 3 4 5	1580	.59	300	182	.59	7500	36	.59
	1415	.59 .59	350	169	.59 .59	8000	35	.59
7.5	1155	.59	400	158	.59	8500	34	.59
10	1000	.59	450	149	.59	9000	33	.59
12	913	.59	500	142	.59	10000	30	.59
15	815	.59	600	129	.59	11000	27	.65
20	707	.59	700	120	.59	12000	25	.65
25	630	.59	750	115	.59	12500	24	.65
30	577	.59	800	110	.59	13500	22	.65
35	534	.59	900	105	.59	14300	21	.65
40	500	.59	1000	100	,59	15000	20	.65
50	450	,59	1100	95	.59	16000	19	.65
75	365	.59	1200	91	.59	17500	17	.65
100	316	.59	1250	89	.59	18000	16	.65
125	283	.59	1500	81	.59	20000	15	.65
			1750	75	.59	22500	13	.65
			2000	70	.59 .59	25000	12	.65
RESIST	ORS		2250	66	.59	30000*	13	.65
		4	2500	63	.59	35000*		.65
			3000	58	.59	40000*		.65
			3500 4000	5 3 50	.59 .59	45000* 50000*	10.5 10	.65 .65
1000	The same	4	*Oper	ated at L	ow lem	perature.	Hated 5	vvatts.

50 WATTS

Type 50F

Size-31/2" x 3/4" Mounting Centers-41/4"

Ohms	Current m. a.	List Price	Ohms	Current m. a.	List Price
1	7070	\$1.56	5000	100	\$1,56
2	5000	1.56	6000	91	1.82
2 3 4	4080	1.56	7500	82	1.82
4	3535	1.56	8000	79	1.82
5	3160	1.56	10000	70	1.82
10	2235	1.56	12000	64	1.82
25	1415	1.56	12500	56	1.82
50	1000	1,56	15000	47	1.82
75	815	1.56	20000	35	1.82
100	707	1,56	25000	28	1.82
150	575	1.56	30000	23	2.08
300	500	1.56	35000	20	2.08
250	445	1.56	40000	18	2.08
300	408	1.56	45000	17	2.08
400	353	1.56	50000	14	2.08
500	316	1.56	75000	9	2.08
750	258	1.56	100000	7	2.08
800	250	1.56	125000	5	2.86
1000	224	1.56	150000	4.6	3.25
1500	180	1.56	175000	4.0	3.25
2000	160	1.56	200000*		3.58
2500	141	1.56	225000*		3.58
3000	130	1.56	250000*	2.8	3.90
4000	110	1.56	1		
*Opera	ted at Lo	« Temp	erature. R	ated 17 V	Vatts.

200 WATTS Type 200F

Size-101/2" x 11/8" Mounting Centers-111/4"

Ohms	Current m. a.	List Price	Ohms	Current m. a.	List Price
1	14140	\$4.68	3500	240	\$3.58
2	10000	4.36	4000	225	3.58
3	8162	4.03	4500	210	3.58
4	7070	3.77	5000	200	3.58
5	6325	3,58	7500	163	3.58
10	4470	3.58	10000	141	3.58
25	2825	3.58	15000	115	4.29
50	2000	3.58	20000	100	4.29
75	1630	3.58	25000	90	4.29
100	1414	3,58	30000	82	4.29
150	1150	3.58	35000	71	4.29
250	900	3.58	40000	62	4,29
500	632	3.58	50000	50	4.29
750	515	3.58	60000	42	4.29
1000	447	3.58	75000	33	4.29
1500	365	3.58	100000	25	4.29
2000	315	3,58	125000	20	4.29
2500	282	3.58	150000	16	4.29
3000	260	3.58			

100 WATTS



WARD LEONARD · VITROHM RESISTORS and RHEOSTATS

ADJUSTABLE RESISTORS -- ADJUSTOHMS

Adjustohm Resistors are for use in any application where it is necessary or desirable to have one or more intermediate resistance values; or in circuits that need to be changed from time to time to meet varying electrical conditions.

Adjustohm Resistors are built of the highest grade low temperature coefficient materials, and are coated with Ward Leonard's tough crazeless Vitreous Enamel.

10 WATTS Type 10A Size-134" x 5/6" No Mounting Brackets

Ohms	Current m. a.	List Price	Ohms	Current m. a.	List Price
1	3160	\$0.98	750	115	\$0.98
2	2235	.98	800	110	.98
2 3 5	1825	.98	1000	100	.98
	1415	.98	1250	89	.98
7.5	1155	.98	1500	81	.98
10	1000	.98	2000	70	.98
15	815	.98	2500	63	.98
20	707	.98	3000	58	.98
25	630	.98	3500	53	.98
50	450	.98	4000	50	.98
75	365	.98	4500	47	.98
100	316	.98	5000	45	.98
150	258	.98	6000	41	.98
200	224	.98	7000	38	.98
250	200	.98	7500	36	.98
300	182	.98	8000	35	.98
350	169	.98	8500	34	.98
400	158	.98	9000	33	.98
500	142	.98	10000	30	.98
600	129	.98	1		

50 WATTS Type 50A

Size-41/2" x 3/4" Mounting Centers-51/8"

	1/2 1	74 1111	sunting 0	0111013	J/8
Ohms	Current m. a.	List Price	Ohms	Current m. a.	List Price
1	7070	\$1.95	3000	130	\$1.95
2 3 4	5000	1.95	3500	120	1.95
3	4080	1.95	4000	110	1.95
4	3535	1.95	4500	105	1.95
5	3160	1.95	5000	100	1.95
10	2235	1.95	6000	91	2.15
25	1415	1.95	7000	85	2,15
50	1000	1.95	7200	83	2.15
75	815	1.95	7500	82	2.15
100	707	1.95	8000	79	2.15
150	5 7 5	1.95	9000	75	2.15
200	500	1.95	10000	71	2.15
250	445	1.95	12000	64	2.15
300	408	1.95	15000	58	2.15
400	353	1.95	20000	48	2.15
500	316	1.95	25000	40	2.15
750	258	1.95	30000	33	2.47
800	250	1.95	40000	25	2.47
1000	224	1.95	50000	20	2.47
1250	200	1.95	60000	17	2.86
1500	180	1.95	75000	13	2.86
2000	160	1.95	80000	12	2.86
2250	150	1.95	100000	10	2.86
2500	141	1.95			

160 WATTS Type 160A

Size-81/2" x 11/8" Mounting Centers-91/4"

Ohms	Current m. a.	List Price	Ohms	Current m. a.	List Price
1	12650	\$4.68	3000	230	\$3.58
2	8940	4.36	3500	215	3.58
3	7300	4.03	4000	200	3.58
4	6320	3.77	4500	185	3.58
5	5650	3.58	5000	178	3,58
10	4000	3.58	7500	146	3.58
15	3265	3.58	10000	126	3.58
25	2525	3.58	15000	105	4.16
50	1785	3.58	20000	90	4.16
100	1265	3.58	25000	80	4.16
200	894	3.58	30000	67	4.16
250	800	3.58	40000	50	4.16
500	565	3.58	50000	40	4.16
1000	400	3.58	60000	33	4.55
1500	326	3.58	75000	26	4.55
2000	280	3,58	80000	25	4.55
2500	259	3.58	100000	20	4.55

25 WATTS

Type 25A Size—2" x %" Mounting Centers—25%"

3120	3126 -2 X 78 Wounting Centers—2%							
Ohms	Current m. a.	List Price	Ohms	Current m. a.	List Price			
1	5000	\$1.24	1250	140	\$1.24			
2	3535	1.24	1500	129	1.24			
2 3 5	2890	1.24	2000	112	1.24			
	2230	1.24	2250	105	1.24			
7.5	1825	1.24	2500	100	1.24			
10	1580	1.24	3000	90	1.24			
15	1290	1.24	3500	8 5	1.24			
20	1115	1.24	4000	80	1.24			
25	1000	1.24	4500	74	1.24			
50	710	1.24	5000	70	1.24			
75	580	1.24	6000	65	1,43			
100	500	1.24	7000	57	1.43			
150	410	1.24	7200	56	1.43			
200	354	1.24	7500	53	1.43			
250	315	1.24	8000	50	1.43			
300	289	1.24	8500	47	1.43			
400	250	1.24	9000	44	1.43			
500	224	1.24	10000	40	1,43			
750	182	1.24	12000	33	1.43			
800	177	1.24	15000	27	1.43			
850	170	1.24	20000	20	1.56			
1000	158	1.24	25000	16	1.56			

75 WATTS

Type 75A

Size-6½" x 34" Mounting Centers-7¼"

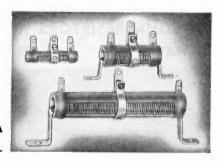
Ohms	Current m. a.	List Price	Ohms	Current m. a.	List Price
1	8660	\$2.54	3000	158	\$2.54
2	6120	2.54	3500	146	2.54
3	5000	2.54	4000	137	2.54
2 3 4 5	4330	2.54	4500	129	2.54
	3870	2.54	5000	122	2.54
10	2740	2.54	6000	111	2.86
15	2235	2.54	7000	103	2.86
25	1730	2.54	7200	102	2.86
50	1220	2.54	7500	100	2.86
75	1000	2.54	8000	97	2.86
100	866	2.54	9000	91	2.86
200	612	2.54	10000	87	2.86
250	550	2.54	15000	71	2.86
300	500	2.54	20000	61	2.86
400	433	2.54	25000	55	2.86
500 750	387	2.54	30000	50	3.25
	315	2.54	35000	43	3.25
800 1000	305 274	2.54	40000	37	3.25
1250	2/4	2.54 2.54	45000 50000	33	3.25
1500	224	2.54	60000	30	3.25
2000	195	2.54	70000	25 21	3.58 3.58
2250	183	2.54	80000	19	3.58
2500	173	2.54	100000	15	3.58
2000	1/3	2.54	100000	15	3.38

200 WATTS

Type 200A

Size-101/2" x 11/8" Mounting Centers-111/4"

Ohms	Current m. a.	List Price	Ohms	Current m. a.	List Price
1	14140	\$5.59	4000	225	\$4.29
2	10000	5.20	4500	210	4.29
3	8160	4.88	5000	200	4.29
4	7070	4.55	7500	163	4.29
5	6320	4.29	10000	141	4.29
10	4470	4.29	15000	115	5.01
25	2825	4.29	20000	100	5.01
50	2000	4.29	25000	90	5.01
100	1414	4.29	30000	82	5.01
250	900	4.29	40000	62	5.01
500	632	4.29	50000	50	5.01
1000	447	4.29	60000	42	5.01
1500	365	4.29	75000	33	5.01
2000	315	4.29	100000	25	5.01
2500	282	4.29	125000	20	5.33
3000 3500	260 240	4.29 4.29	150000	16	5.33



WATT RATINGS

Nominal watt ratings for Adjustohm Resistors apply when the entire resistor is in the circuit. For most practical purposes the watt rating for each part of the resistor is approximately proportional to the amount of the resistance that is in the circuit.

Mounting brackets are furnished with all Adjustohm Resistors, except the 10-watt size, Type 10A.

Price of resistor includes brackets and one adjustable band.

100 WATTS

Type 100A

Size-61/2" x 11/8" Mounting Centers-71/4"

Ohms	Current m. a.	List Price	Ohms	Current m. a.	List Price
1	10000	\$2.86	2500	200	\$2.86
2	7070	2.86	3000	180	2.86
3	5770	2.86	4000	160	2.86
4	5000	2.86	4500	150	2.86
5	4470	2.86	5000	114	2.86
10	3160	2.86	6000	130	3.25
25	2000	2.86	7500	115	3.25
50	1410	2.86	10000	100	3.25
100	1000	2.86	15000	80	3.25
200	707	2.86	20000	70	3,25
250	630	2.86	25000	60	3.25
400	500	2.86	30000	50	3.58
500	447	2.86	40000	37	3.58
750	365	2.86	50000	30	3.58
1000	316	2.86	60000	25	3.90
1500	260	2.86	75000	20	3.90
2000	225	2.86	100000	15	3.90

ADJUSTABLE BANDS

Each Adjustohm Resistor is furnished with one Screw - Driver Type Adjustable Band Terminal (at right in illustration).

Additional band terminals are available. See list in the accompanying table.

Size of	Screw D Typ		Bakelite Typ	
Resistor	Cat. No.	Price	Cat. No.	Price
10 Watts	507-685	\$0,13		
25 Watts	507-686	.13	507-691	\$0.20
50 Watts	507-688	.13	507-693	.20
75 Watts	507-688	.13	507-693	.20
100 Watts	507-690	.20	507-695	.33
160 Watts	507-690	.20	507-695	.33
200 Watts	507-690	.20	507-695	.33



WARD LEONARD · VITROHM RESISTORS and RHEOSTATS

DISCOHM RESISTORS 18 WATTS Type 18D



Discohms are flat refractory discs having resistance wire arranged to minimize the values of inductance and distributed capacitance.

Discohm Resistors are especially useful in equipments where space is limited and where a power resistor having low value of inductance and distributed capacitance is required.

They are mounted by means of: No. 8 wood screw or bolt through the counterstrik hole cast in the refractory base. Two or more units can be mounted together to obtain various resistance values and watt ratings.

Discohm Resistors are rated at 18 watts with free ventilation. A single Resistor mounted on a panel should operate safely at 80% of the full watt rating or 90% of the full current rating.

	Current	List
Ohms	m.a.	Pţice
1.0	4240	\$1.95
1.6	3350	1,95
2.5	2680	1.95
4.0	2120	1.95
6.4	1680	1,95
10	1340	1.95
16	1060	1.95
25	850	1.95
40	670	2.21
64	530	2.21
100	420	2.21
160	335	2.34
250	268	2.34
400	212	2,34
640	168	2,34
1000	134	2.34
1600	106	2.34
2500	85	2,34
4000	67	2.34

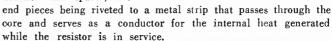
VITROHM STRIP RESISTORS

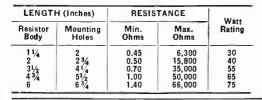
Vitrohm Strip Resistors lend themselves readily to applications where space is limited, such as aircraft control circuits, radio instruments, and similar apparatus. Vitrohm Strip Resistors are built on a strong flat reinforced core that has no

sharp angular surfaces, providing a smooth continuous form of the resistance

winding. The resistors are vitreous enamel coated. Each unit is fitted with

Each unit is fitted with a self-sustained mounting bracket and spacer, the





FLUORESCENT LAMP RESISTORS



Ward Leonard Fluorescent Lamp Resistors are designed for use in buorescent lamps operating on direct current. They meet the requirements of lamp and fixture manufacturers and are listed as standard

by the Underwriters' Laboratories, Inc., and by the New York City Department of Water Supply, Gas and Electricity.

Ward Leonard Fluorescent Lamp Resistors are mounted in well-ventilated metal enclosures for installation on standard fixtures. They are made for use on 115-volt, 120-volt and 220-volt circuits and in various resistance values to meet the requirements of the lamps with which they are to be used.

Long, flexible asbestos covered leads facilitate connections.

Plug-In Type For Portable Fixtures

Ward Leonard also provides a Fluorescent Lamp Resistor in a metal enclosure for use

ating on 120-volt cir-

with portable lamps operating on 120-volt circuits. It is fitted with a plug on one end for inserting into the line receptacle and a receptacle on the other end into which the plug on the figure is placed.

The Plug-In Resistor is made for use on 15-watt and 20-watt lamp fixtures.

LINE VOLTAGE REDUCERS

Ward Leonard Line Voltage Reducers protect radio sets, soldering irons, Christmas tree lamp strings, and other electrical appliances within the ratings of the Reducers, from high line voltage.

Line Voltage Reducers consist of a resistor network encased in a perforated metal enclosure provided with standard parallel prongs on one end and a standard receptacle on the other. Connection is made by plugging the Reducer into a receptacle and then inserting the plug on the appliance in the receptacle on the enclosure.

Catalog Number	Length Inches			List Price
507-109	11/2	25.	For 65-130 watt 115 volt radio set on 115-140 volts	\$2.28
507-109A	11/2	10.		2.28
507-109B	21/4	4.5		2.73
507-109H	51/4	300.		3.58





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AUTOMATIC

AMPERITE

REGULATOR

BALLAST TUBE FOR AUTOMATIC REGULATION OF CURRENT AND VOLTAGE





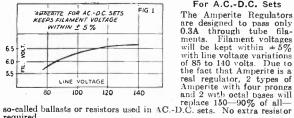
AMPERITE is an automatic rheostat designed to keep the current in a circuit at a definite value, for example, 0.5 amps. Should the supply voltage increase, the Amperite will automatically increase in resistance enough to take up the increase in supply voltage — keeping the voltage on the load constant.

PRICES: The proper AMPERITE Replacement may be determined by looking up the number under column "FOR" and noting corresponding Amperite in the column "USE AMPERITE". Numbers in "FOR" column run consecutively and then alphabetically.

*The letter code in the center column is interpreted as follows:

aFor	110V. A.CD.C. SetsList Price \$1.25
b-For	2V. Battery Sets 2.25
c—ror	110V. A.C. Sets 2.25
h—For	220V. A.CD.C. Sets
r—For	110V. A.C. Sets having 70-95V. Primary 1.25
s-For	special apparatus 3.00

A C. - D. C. SETS

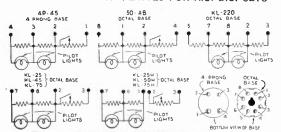


For A.C.-D.C. Sets

The Amperite Regulators are designed to pass only 0.3A through tube filaments. Filanment voltages will be kept within ± 5% with line voltage variations of 85 to 140 volts. Due to the fact that Amperite is a

Pilot Lights—None, one or two of either 0.150A or 0.250A can be used with same Amperite. Should a pilot light burn out, the set will continue to operate properly without any damage to the Amperite, tubes or other parts. The patented starting resistor in the Amperite prevents overloading and premature burning-out of tubes and pilot lights. In some sets the ballast socket is purposely wired in such a way that the Pilot Light Resistors of standard ballasts would be burned out if inserted. In such sets special Amperites are required, as shown in table. A woid burnouts—use proper Amperite. Avoid burnouts-use proper Amperite.

BASE WIRING OF AMPERITES FOR A.C.-D.C. SETS



AMPERITES FOR 2-VOLT BATTERY SETS

Two-volt tube filaments are delicate and easily overloaded. Keeping the tube filaments at their proper voltage with a real regulator like Amperite invariably results in considerably more battery and tube life. The same Amperite can be used for dry cell, air cell, or 2 volt storage battery operation. The proper Amperite is determined by the total filament-current drain of the set. e.g.-for 0.5A use Amperite 5E1, etc.

REPLACEMENT REGULATORS-A.C.-D.C. SETS List \$1.25

Amperite	Amperite Numbers S	nown Replace All A	i.CD.C. Ballast
Ño.	Starting With Letter	With Numbers From	Ending In
KL.25 # KL.45 KL.75	K, L, M or BK BL or BM	10 to 36 36 " 67 67 " 105	A. B. C. or D
KL.25H KL.50H KL.75H	K, L, M, or BK	11 to 26 36 " 67 67 " 105	F, G, or H
KL,50S1 KL,50S2 KL,50S3	K or L	40 to 100	S1 82 S3
KL,50E	и	36 " 67	E

Except K18B, use Amperite K18B-4Prong Base.

For		Use perite	For	*	Use Amperite	For	*	Use Amperite	For		Use Amperite
.002	a R30		3MR-253	a	3 M R-253	9A10	c	9A10	397021	c	397021
.03G .038	a .03	G 20	3MZ-419	a	3MZ-419 3MZ419A	9-20	r	9-20	10	a	3-40
.042	b 5E1	1	3M7,419A	24	5M Z419A	9-150 9-220	C	9-150 9-220	40W 40A2	a	3-40 4P45
			4		4	9M 15822	c	9M15822	40B2	a	4P45
1-1	r 1-1		4-1		1G1	9M 16534		9M16534	40X300	a	
1A1 1A2	b 5101	I	4A1 4A 10	h	4A1 4A10	9V10	c	8A5	41-7E	8	41-7E
1A-10	s 1A-	-10	4-20		4-20	10-1	b	10-1	42A	a	3-40
			4-150	r		10-4	S	10-4	42A1	a	50AB
1B1	b 3H	1		c		10A 10	c	10A10	42A2	a	50AB
1B2 1C1	b 31 b 7H	,	4-220 4H-1	C	4-220 4H-1	10A- 10AB	a	10A 5H-1	42B2		50AB
1C2	b 52	•	711 1	1	411-1	10V 10	b	10V10	42HA	a	
1D1	b 2H-		4SR311	a	4SR311	10-20	Г	10-20	45W	a	4P45
1D2 1E1	b ID2		4-TU-9	a	KL-45	10-23A		KL-25			
1E2	b 5E1 b 1E2		5	a	5	10-25 10-150		10-25 10-150	46A1 46B1	a	46A1 46B1
1F1	b 7-1		5B		3-40	10-220	c	10 220	49A		4P45
1G1	b 4-1		5-1	b	5E1	10-610		10-610	49A 1		50AB
1H-1 1J1	b 1H- b 6-1	-1	5A 10		5A10			11 4 10	49A2		50AB
1K1	b 5H-	-1	5-10 5-16		5-10 5-16	11A10 11-20		11A10 11-20	49B2 50MG		50AB KL50S1
1L1	b 1L1		5-20		5-20	1 20	6.5	11-20	50W		4P45
1N1 1P1	b INI		5-150	C	5150	12A10	c	12A10	50A2	a	4P45
1Q1	b 1P1 b 1Q1		5-220	C	5220	12-20 12-150		12-20 12-150	50A2MG		KL50S2
îŘî	biRi		5E1	ь	5E1	12-220		12 220	50B2 50B2MG		4P45 KL50S1
181	b 1S1		5H-1	b	5H-1	1			50X3 50X3T		4P45
1T1 1U1	b 1T1 b 1U1		5H-3		5H-3	13-4	100	13-4	50X3T	3.	4P45
1V1	b 5H-		5H-10 5H-20		5H-10 5H-20	13 A 10 13 – 20		13A 10 13-20	50X300	a	4P45
1W1	b 1W1		5H-150	c	5H-150	14A10		14A10	52	ь	1C2
1Y1 1Z1	b b 9-1		5H-220	c	5H-220	14-20	г	14-20			
17.1	D 9-1		б	1	1F1	15A10		15A 10	55A 55H	a	KL45 KL50 H
2	a 2		6-1	b	iJi	15-10	r	15-10	55LB		L55B
2-1 2A10	b 2-1	,	6-3		6-3	15-20	r	15-20	55KB		KL-45
2CR-241	c 2A1	-45	6-4 6T4		6-4 6T4	16A10	c	16A10	60-92A		KL-75
2LR-212	a 50A	В	6116		6H6	17-2		17-2	60R30		60R30G
2M2	s 2M2		6A10		6A10	17-3		17-3	60R30G		60R30G
2UR-215 2UR-224	a KL-		5-11 6-20	S	6-11 6-20	17A470	c	17 A 470- 303	64.23 67A		Tr.Y. 45
2H-1	b 1D1		6-150	c	6-150		c	17A485-	69-2027		KL45 3-40
2H-2E	b 2H-		6-220	c	6-220	49	1	59	69-2028	hi	3-220
2H-10 2H-20	c 2H- r 2H-		6AA	h	5E1	17A485- 459		17A 485- 459	69-2033		KI-45
2R67	b 2R6				4P45	18-10	c	18-10	66-2037	a	KL-45
	I ADA				KL-45.J				70	r	70
3 3-1	a 4P48 b 3-1				KL-45J KL-45J	20-1 20-4		20-1 20-4	75		KL-75
3-4	s 3-4		1 111	a	KL-45J			20A5	77–109 77–126		77–109 77–126
3T4	s 3T4			a	6130	20-10	r i	20-10	77-127	a	77-127
3A10 3-16	c 3A10 s 3-16					22-10 23-55A	T	22-10			77-128
3A 20	8 3A20			a	KL-45J		a	KL-45 KL-50H	77–181 80	a	77–181 4P 45
3-25	a 3-25					23-3	3	23-3	80R	3 8	80R
3-40 3-100	a 3-40 s 3-10		7 7–1	a	7 1F1	23-55A		KL25	85L75CC	h	S5L75CC
3-150	c 3-15					20 0		KL45 KL45	90	r	nn.
3-220	h 3-22									a	4P45
2CD 941	TEL	42	.			24-4	S			a l	KL-45
3CR 241 3ER 248	a KL	45.I			4P45 8-1	30	ь.	IA2	98	r	9-20
3ER-249	h 3ER	-249	8A10	c	8A10			3-25	100	r	9-20
	b 1B1		8-20	r	8-20	31	b :	IB2	100.R8	a	4P45
3H-2E	b 3H-2 r 3H-1						a	KL-50H KL-25		al	KL-45J
3H-20	r 3H-2	20			i	33-310	4				KL-45J
3H-150	c 311-1	150			1P45	3,6D5	a 3	3,6D5	100-46	a l	100-46
3H-220	c 3H-2	220 1	9-1	b :	1Z1	36A	a. I	KL-25	100-47	a 1	100-47

(Continued on next page)

PRICES	For	Use Amperite	For	Use * Amperite	For	Use Amperite	For	Use • Amperite	For	Use Amperite
The proper AMPERITE Replacement may be determined by looking up the number under column "FOR" and noting corresponding Amperite in the column "USE AMPERITE". Numbers in "FOR" column run consecutively	K11H K11J	a KL-25H a KL-25J	K55J K55S1	a KL-50J a KL-50S1	KX42A a KX42B a	4P45 4P45	L42E	a KL-45J a KL-50E a KL-50E	L87J L90CC L90S1	a KL-50J a L90CC a KL-50S1
Numbers in "FOR" column run consecutively and then alphabetically. *The letter code in the center column is inter-	K17AJ K17BJ K17E	a K17AJ a K17BJ a KL25E	K55S3	a KL-50S3	KX46A E KX49C	4P45 4P45	L42F L42G	a KL-50H a KL-50H a KL-50H	L90S2 L90S3 L92A	a KL-50S2 a KL-50S3 a KL-75
preted as follows: a—For 110V. A.CD.C. Sets	K17R K18A K18B	a K17R a KL25 a K18B	K67B K67B2	al50AB	KX55B E KX55C E	4P45	L42J L42S1	a KL-50J a KL-50S1 a KL-50S2	L92B L92D L92E	a KL-75 a KL-75 a KL-75E
b—For 2V. Battery Sets 2.25 c—For 110V. A.C. Sets 2.25 h—For 220V. A.CD.C.Sets 2.25	K18B2 K18C K18D K18E	a 25B2 a KL-25 a KL-25 a KL-25E	K67D K67E	a KL-45 a KL-50E	KX74A KX74B	4P45 4P45 4P45 4P45	L42S3 L49A	a KL-45	L92F L92G L92H	a KL-75H a KL-75H a KL-75H
preted as follows: a—For 110V. A.CD.C. Sets	K18E1 K18F K18G	a KL-25E a KL-25H a KL-25H	K67F K67G K67H	a KL-50H a KL-50H a KL-50H	KY42A KY42B	50AB 50AB	L49BJ	a KL-45 a 50AB a L49BJ	L92J L99D L100D	a KL-75J a KL-75 a KL-75 a KL-45
Use Use Use	K18H K18J	a KL-25H a KL-25J	K67J K67S1 K67S2	a KL-50J a KL-50S1 a KL-50S2	KY55A KY55B	50AB 50AB 50AB	L49BSX L49C	a L49BX h 220SX a KL-45 a KL-45J	L120- 75CC L122B LLL25	a KL-75 b 5H1
For * Amperite For * Amperite For * Amperite 100-48 h 3ER249 165KC a 4P45 808-4 a 808-4	K22A K22B K22B2	a KL-25 a KL-25 a K22B2	K72B	a KL-50S3	KZ49A	a KL-50S1 a KL-50S1	L49CJ L49D L49DJ	a KL-45 a KL-45 a KL-45J a L49BX	LLL-228 LX42B LX42C	b 5E1 a 4P45 a 4P45
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	K22C	a KL-25 a KL-25 a KL-25 a KL-25E	K74A K74B K74B2 K74C	a KL-45 a KL-45 a 50AB a KL-45	KZ49C	a KL-50S2	L49DSX L49E	h 220SX a KL-50E a KL-50E	LX42D LX49B LX49C	a 4P45 a 4P45 a 4P45
100-55 a 100-55 105L8 a 4P45 878R48 a 878R48 100-56 105L44 a 4P45 1916 a 1916 100-57 h 3ER-249 165M4 a 4P45 3271 a 3271	K22E1 K22F K22G	a KL-25E a KL-25H a KL-25H	K74D K74E	a KL-45 a KL-50E	L11B	a KL-25 a 25B2 a KL-25	L49E1 L49G L49H	a KL-50E a KL-50H a KL-50H	LX49D LX55B	a 4P45 a 4P45 a 4P45
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	K22H K22J K23E	a KL-25H a KL-25J a KL-25E	K74F K74G K74H	a KL-50H a KL-50H a KL-50H	L11D L11E L11E1	a KL-25 a KL-25E a KL-25E	L49J L49S1 L49S2	a KL-50J a KL-50S1 a KL-50S2	M27HG	
100-62 a 100-62 165R44 a 4P45 3334A a KL-45 100-63 a 100-63 a 100-63 a 100-63 a 100-63 a 100-64 a KL-45		a KL-45J a KL-25 a K26J218 a KL-25	K74J K74S1 K74S2	a KL-50J a KL-50S1 a KL-50S2	L11G L11H	a KL-25H a KL-25H a KL-25H	L49S3 L55A L55B	a KL-50S3 a KL-45 a L55B	M36C M36H M42B	a KL-25H a KL-25H a KL-45
100-65 h 3ER-249 185A a 4P45 5184 a 5184 100-66 h 3ER-249 185KB a 4P45 5459 c 5459 0 100-70 a KL-45J 185KC a 4P45	K30B K30B2 K30C K30D	a 25,B2 a KL-25 a KL-25	K74S3 K75B K78B K79B	a KL-50S3 a KL-75 a KL-75 a KL-75		a KL-25J a KL-25 a KL-25	L55B2 L55C L555 50	a 50AB a KL-45	M42C M42D M42HG	a KL-45 a KL-45
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	K30E K30E1 K30F	a KL-25E a KL-25E a KL-25H	K80A K80B	a KL-75	L18B2 L18C L18D	a 25B2 a KL–25 a KL–25	L55CP L55CPI L55D	a K55CP a KL-45	M42H M45R	a KL-50H a KL-45
100-81 a 100-81 185LC a 4P45 8601 a KL-50I 101 r 9-20 185M4 a 4P45 8664 a KL-50I 105 r 9-20 185M8 a 4P45	K30G K30H K30J	a KL-25H a KL-25H a KL-25J	K80B2 K80C K80D	a 50AB	7 10T1	a KL-25E a KL-25E a KL-25H	L55E L55E1 L55F L55G	a KL-50E a KL-50E a KL-50H a KL-50H	M49B M49E1 M49H	a KL-45 a KL-50E a KL-50H a KL-50H
110 r 11-20 185R a 4P45 81963 a 81963 185R4 a 4P45 81966 a KL-45 115-14 a KL-75 185R8 a 4P45 81973 a 81973	K36A K36B	a KL-45 a KL-45	K80E K80E1 K80F	a KL-75 a KL-50El a KL-50El a KL-75H a KL-75H a KL-75H a KL-75J a KL-75J	L18G L18H L18J	a KL–25H a KL–25H a KL–25J	L55H L55J L55S1	a KL-50H a KL-50J a KL-50S	M50R M52H	a KL-50H a KL-50H a L55B
115-17 a 115-17 185R44 a 4P45 84152 a 84152 115-18 a 115-17 192A a MT650 86892-9 a 86892-9 115-18 a 115-18 200R a 200R 115-19 a 115-19 200R4 a 4P45 26871 a 26871	K36B2 K36C K36D K36E	a 50AB a KL-45 a KL-45 a KL-50E	K80G K80H K80J K80S1	a KL-75H a KL-75J a KL-50S1	L22A L22B L22B2	a KL-25 a KL-25 a 25B2	L55S2 L55S3	a KL-50S a KL-50S	M55D M55E M55E1	a KL-45 a KL-50E a KL-50E
115-20 a 115-20 200R8 a 4P45 35000 a 35000 115-22 a KL-45 84428 a 84428 a 115-24 903 c 12A5 397021 c 1397021	K36E1 K36F K36G	a KL-50E a KL-50H a KL-50H	K80S2 K80S3 K83747-	a KL-50S1 a KL-50S2 a KL-50S3 a K83747-6	L22C L22D L22E	a KL-25 a KL-25 a KL-25E	L66B L67A	a KL-45	M55H M55HC M61B	a KL-50H a KL-50H a KL-45
115-25 a 115-25 216 c 11A5 922337-1 a 922337 115-26 a 115-26 218 r 18-10 r 15-27 a 115-27 245A a 4P45 BBR c BBR	K36J	a KL-50H a KL-50J	K87A K87B	a KL-75 a KL-75 a 75B2	L22E1 L22F L22G L22H	a KL-25E a KL-25H a KL-25H a KL-25H	L67B L67B2 L67C L67D	a KL-45 a 50AB a KL-45 a KL-45	M80B M80H M80H	a KL-75 a KL-75H
115-28 a KL-45 245KB a 4P45 B9M16- c B9M16 115-28 a KL-45 245KC a 4P45 822 822 115-40 a KL-45 250KB a 4P45 BK42D a KL-45	K40B K40X	a K38B2 a KL-45 a 4P45 a 4P45	K87B2 K87C K87D K87E	a KL-75 a KL-75 a KL-75E	L22J L26CC	a KL-25J	L67E L67E1 L67F	a KL-50E a KL-50E a KL-50E	MT-65	0 a MT-650
115-42 a KL-25 250KC a 4P45 BK49B a BK49B 115-42A a 115-42A 250L4 a 4P45 BK49D a KL-45 115-43 b 3ER-240 250L8 a 4P45 BK55B a KL-45	K40Y K42A K42B K42B2	a KL-45 a KL-45 a 50AB	K87E1 K87F K87G	a KL-75E a KL-75H a KL-75H a KL-75H	L26CC- 159		L67G L67H L67J L67S1	a KL-50H a KL-50H a KL-50J a KL-50S	NB-2 NB-3	b NB-1 b NB-2 b NB-3 b NB-4
115-44 h3ER-249 250M4 a 4F45 BK55D a KL-45 115-46 a 115-46 250M8 a 4F45 Bkv51dj a Bkv51c 115-47 a 250R a 250R	j K42B-F K42C K42D	4 a K42B-K a KL-45 a KL-45	K8751	a KL-75H a KL-75J a KL-75S1 a KL-75S2	L30B L30B2	a KL-25 a KL-25 a 25B2 a KL-25	L67S2 L67S3	a KL-50S a KL-50S	2 NB-5	b NB-5 b NB-6 b NB-7
115-53 a KL-45 250R8 a 4P45 BL42C a KL-45 BL42C a KL-45 KL-45 BL42C a BL42C	K42E K42E1 K42F	lalki _50H	K87S3	a KL-75S3	L30CC	a L30CC	L74A L74B L74B2	a KL-45 a KL-75 a 50AB	NB-8 NTH	b NB-8 a MT-650 a KL-45
120R8 a 4P45 BL49D a KL-45	K42G K42H K42J K42CG K43B-	a KL-50H a KL-50H a KL-50H a KL-50J a 4P45		a KL-75H a KL-75 a KL-75	L30E1 L30F L30G L30H	a KL-50E a KL-50E a KL-25H a KL-25H a KL-25H	L74C L74D L74E L74F	a 50AB a KL-75 a KL-75 a KL-75I a KL-75I a KL-75I a KL-75I a KL-753 a KL-753 a KL-508 a KL-508	NUB PB57 P27287	a KL-45 a PB57 a KL-50E
130B a 4P45 270M8 a 4P45 BM42B a KL-45	K43B-	a KL-45	K92B2	a KL-75 a KL-75 a KL-75	L30J L36A	a KL-255	L74G L74H L74J	a KL-75I a KL-75I a KL-75I	P26871 R6V	a P26871
130R8 a 4P45 270R4 a 4P45 BM42D a KL-45 RI-45 BM49B a KL-45 RI-45 BM49B a KL-45 RI-45 BM49B a KL-45 BM55B a KL-45 BM55B a KL-45 BM55B a KL-45 BM55B a KL-45 BM55D	K49B K49B2 K49C	a KL-45 a 50AB a KL-45	K92E1 K92F K92G	a KL-75E a KL-75H a KL-75H	L36B L36BG L36B2 L36C L36D	a KL-25 a KL-45 a 4P45 a 50AB	L74S1 L74S2 L74S3	a KL-505 a KL-505 a KL-505	1 R1000 2 R10001 3 R-3003	a R1000 R c R1000R B a R-3003
	K49D K49D- K49E	a KI_45 a KI_45 a KI_45 a KI_45 a KI_45 a KI_45 a KI_50B a AP45	K92E K92E1 K92F K92G K92H K92J K92S1 K92S2 K92S3	a KL-75 a KL-75 a KL-75 a KL-75 a 75B2 a KL-75 a KL-75 a KL-75 a KL-75H a KL-75H a KL-75H a KL-75S a KL-75S a KL-75S	L36C L36D 1 L36E	a KL-45 a KL-45 a KL-50E	L75CC L150B L159B	a KL-45 h L150B h L159B	R1100 R43B2 R130-1 R161-3	80
140R 8 a 4P45 1315 r 15=20 1D5=10 IsiD5=10	K49F K49G K49H	a KL-50H a KL-50H a KL-50H	K92S2 K92S3		2 L36E1 3 L36F L36G L36H	a KL-50H a KL-50H a KL-50H	L80A L80B	a KL-75	RR782	a K26J218
14014	K49J K49C0 K49X	a KL-50J a 4P45 a 4P45 a 4P45	K95B K99A	a KL-75	11.261	a KL-50J a KL-45J a KL-45	L80B2 L80C L80D	a 72B2 a KL-75 a KL-75	TBR- 102D TU-34 TU-83	a KL-45
145A a 145A 424-90 r 6-20 E157 E-157	K49Y K49S1 K49S2 K49S3	a KL50S1	K99B2 K99C K99D	a KL-75 a KL-75 a 75B2 a KL-75 a KL-75 a KL-75 a KL-75E a KL-50 a KL-50 a KL-752 a KL-752 a KL-753 a KL-753	L40D L40E L40S1 L40S2	a KL-50E a KL-50H a KL-50H a KL-50H a KL-50H a KL-50H a KL-50H a KL-45J a KL-45J a KL-45 a KL-45 a KL-50S a KL-50S a KL-50S	L80B L80B2 L80C L80D L80E L80F 1 L80F 1 L80H 2 L80J L80S1 L80S2 L80S3 L85CC	a 72B2 a KL-75	WRL5	87 s W-41187
155 c 439 r 3H-20 FBE- 18-10 444-90 r 3-20 FBE- 14-20 FBE	324 K52H	a KL-501 a KL-45 a L-55B	K99E1	a KL-75E a KL-75E a KL-50I	L40S3 L40S3	a KL-50S	3 L80J L80S1 L80S2	a KL-75. a KL-50 a KL-50	W-421 W-425 W-432 W-432	87 s W-41187 0.5 b 3H-1C 201 a W-42520 251 b 5E1 157 a KL-45 282 b 6-1 118 b 1G1 338 c W-44338 288 a KL-45 416 a KL-45 416 a KL-45
	K55B	a L-55B a 50AB a KL-45	1K99G	a KL-50H a KL-75H a KL-75J	H L42A L42B H L42BG L42B2 L42BX	a KL-45 a KL-45 a 4P-45 a 50AB a L42BX a 220SX a KL-45 a L42CS a KL-45 a L42CS	L80S3 L85CC	a KL-50 a KL-75	53 W -432 W -441 W -443	282 b 6-1 118 b 1G1 338 c W-44338
160-41 a 484-90 r 16-20 K11A a KL-2 160-42 a 484-200 r 7-20 K11B a KL-2 160-43 a 495K1 a 495K1 K11B2 a 25B2 160KB a 4P45 538 r 9-20 K11D a KL-2	K55C K55C K55D	2 a 50AB a KL-45 P a K55CP PR a K55CP	K99S1 K99S2 K99S3	a KL-758	1 L42BX 1 L42SX 1 L42C 1 L42CJ 1 L42CS4	a L42BX a 220SX a KL-45 a KL-45	L87A L87B L87C L87D	a KL-75 a KL-75 a KL-75	W-45' W-46' W-46	788 a KL-45 773 a KL-45 416 a KL-45
	5 K55E 5E K55E 5E K55F 5H K55G	1 a KL-50	K1336	a KL-45 a K150A a 60R300	L42CS4	a L42CS4 a KL-45 a L42B X X h 220SX	L87E L87F L87G	a KI-75 a KL-75 a KL-75 a KI-75 a KI-75 a KI-75 a KI-75	E W 467 H X35-3 H X55B	73 a KL-45 35 a KL-45 a KL-25 a KL-45
164 6/7A5 610-10 a 610-10 K11E1 a KL-2 165K a 4P45 808-1 a 808-5 K11F a KL-2 165K a 4P45 808-2 a 808-2 K11G a KL-2	5H K55H	a KL-50	H KX23	R la 878R48	L42DS	X h 220SX	LS7H			U. C. P., Inc.

RESISTORS by RESISTORS, INC.

REGISTORS, INC.

Chicago 16, Illinois

Resistors by RESISTORS, INC. — the choice of engineers and hams alike — enjoy wide acceptance because they are wound right — rated right — merchandised right. The complete range of fixed and adjustable resistors assures you maximum profits and service. Resistors are attractively

packaged for eye appeal, a decided sales aid. Silver soldered connections — selected materials —precision fabrication. RESISTORS' Resistors are designed and produced under close personal supervision.

FIXED RESISTORS



5 WATT
TYPE 1 1/4F - FIXED
1 thru 10,000 Ohms

\$.50

10 WATT
TYPE 1 3/4 M - FIXED
1 thru 50,000 Ohms

\$.56



10 WATT
TYPE 1 3/4 M - CENTER TAPPED
10 to 200 Ohms

\$.72

Prices do not include mounting brackets



20 WATT - TYPE 2K - FIXED	
1 thru 15,000 Ohms	\$.91
20,000 thru 50,000 Ohms	1.07
*60,000 thru 100,000 Ohms	1.42
25 WATT - TYPE 2B - FIXED	
1 thru 5,000 Ohms	\$1.04
6,000 thru 15,000 Ohms	1.17
20,000 thru 50,000 Ohms	1,42
*60,000 Ohms	1.63
*70,000 thru 80,000 Ohms	1.82
*100,000 Ohms	2.47
50 WATT - TYPE 41/2C - FIXED	
1 thru 5,000 Ohms	\$1.56
6,000 thru 25,000 Ohms	1.77
30,000 thru 80,000 Ohms	2.05
100,000 Ohms	2.08
*Supplied with low t	

80 WATT - TYPE 61/2 C - FIXED	
1 thru 5,000 Ohms	\$1.95
6,000 thru 25,000 Ohms	2.28
30,000 thru 50,000 Ohms	2.60
60,000 thru 100,000 Ohms	2.93
100 WATT - TYPE61/2R - FIXED	-
1 thru 5,000 Ohms	\$2.13
6,000 thru 25,000 Ohms	
30,000 thru 50,000 Ohms	
60,000 thru 80,000 Ohms	
100,000 Ohms	
3 Ohm	3.06
60,000 thru 100,000 Ohms	
200 WATT - TYPE 10½R - FIXED	3.84
200 WATT - TYPE 10½R - FIXED 1 Ohm	\$4.68
200 WATT - TYPE 10½R - FIXED 1 Ohm	\$4.68 4.33
200 WATT - TYPE 10½R - FIXED 1 Ohm	\$4.68 4.33 3.98
200 WATT - TYPE 10½R - FIXED 1 Ohm	\$4.68 4.33 3.98 3.77

*Supplied with low temperature coating. Vitreous enamel coating at higher prices. 20 WATT to 200 WATT inclusive, listed above, supplied with mounting brackets.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

ADJUSTABLE RESISTORS

(Supplied with mounting brackets)

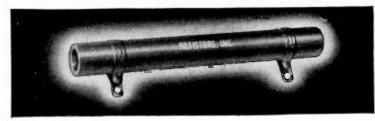


\$	\$.85
	\$1.21
	1.35
	1.56
	\$1.91
	2.13
	2.47
	2.86
.,	\$2.48
	2.8

100 WATT - TYPE 61/2 RA - ADJUSTABLE	
1 thru 5,000 Ohms	\$2.85
6,000 thru 25,000 Ohms	3.20
30,000 thru 50,000 Ohms	3.55
60,000 thru 100,000 Ohms	
160 WATT - TYPE 81/2 RA - ADJUSTABLE	
1 Ohm	\$4.68
2 Ohm	
3 Ohm	3.98
4 Ohm	3.77
5 thru 10,000 Ohms	3.55
12,000 thru 50,000 Ohms	4.12
60,000 thru 100,000 Ohms	
200 WATT - TYPE 101/2RA - ADJUSTABLE	
1 Ohm	\$5.47
2 Ohm	5.19
3 Ohm.	4.84
4 Ohm	4.55
5 thru 10,000 Ohms	4.26
12,000 thru 100,000 Ohms	4.98

STANDARD ADJUSTABLE LUG - SCREW DRIVER TYPE





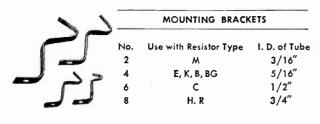
R. F. PLATE CHOKES

Type	L-1	.33
Туре	L-2	1.04
Type	L-3	1.56
Туре	L-4	2.15

POWER LINE CHOKES

Type	L-10	2.15
	L-11	3.58
Type	L-12	5.20







CENTERING	WASHERS
Type No.	I. D. of Tube
1	3/16"
2	5/16"
3	1/2"
4	3/4"

Manufactured by RESISTORS, INC., Chicago 16, Illinois



ARDWICK-HINDLE INC.



VITREOUS ENAMELED RHEOSTATS INSULATED SHAFTS and MOUNTING BUSHINGS



TYPE 2462-F - Designed for relatively low wattage requirements. Resistance wire is wound upon a heat resisting phenolic strip. The wound strip is rigidly attached to a refractory base. Contact arm of beryllium copper gives uniform pressure, smooth action and long



TYPE M (Style 2879 3TC)-Rugged and compact. Has exceptional heat dissipation. Resistance wire is wound on a pure mica form, in a refractory base and embedded in vitreous enamel, bonding winding and base together. A small area of winding is free of enamel for contact purposes. Smooth action metallic contactor.



TYPES B-50, C-100, D-150, E-300 and F-500 embody the latest de-velopments. Contact sysvelopments. Contact system separates current handling and contact pressure. Copper-graphite contact brush in porcelain holder travels on inside of winding. Wound ring and contact system as winding. Wound ring and contact system as-sembled to metal base —gives great rigidity, lower panel temperatures.

TABLES OF SIZES AND RATINGS OF RHEOSTATS

TYPE	2462-F—1	0 W. RHE	OSTAT	TYPE	M-25 W	ATT RHEO	STAT	TYP	E B-50 W	ATT RHEO	STAT	TYPE	C-100 W	ATT RHE	DSTAT
Stock No.	Total Ohms	Max. Amps.*	List Price	Stock No.	Total Ohms	Max. Amps.*	List Price	Stock No.	Total Ohms	Max. Amps.*	List Price	Stock No.	Total Ohms	Max. Amps.*	List Price
0101 0102 0103 0104 0105 0106 0107 0108 0109 0110	Ohms 1 1.5 2.5 5 7.5 10 15 25 50 75 100	3.16 2.58 2.00 1.42 1.16 1.00 0.815 0.634 0.448 0.366 0.316	\$3.85 3.85 3.85 3.85 3.85 3.85 3.85 3.85	0201 0202 0203 0204 0205 0206 0207 0208 0209 0210 0211 0212 0213	0.50 0.75 1.0 1.5 2.5 5.0 7.5 10 15 25 50 75	7.06 5.77 5.00 4.08 3.16 2.22 1.58 1.29 1.00 0.706 0.577 0.500	\$4.90 4.90 4.20 4.20 4.20 4.20 4.20 4.20 4.20 4.2	0301 0302 0303 0304 0305 0306 0307 0308 0309 0310 0311 0312	Ohms 0.50 0.75 1.0 1.5 2.5 5.0 7.5 10 15 25 50 75	10.0 8.16 7.06 5.77 4.48 3.16 2.58 2.22 1.82 1.41 1.00 0.816 0.706	\$6.50 6.50 6.50 5.85 5.85 5.85 5.85 5.85 5.85 5.85 5	No. 0401 0402 0403 0404 0405 0406 0407 0408 0409 0410 0411 0412 0413	Ohms 0.50 0.75 1.0 1.5 2.5 5.0 7.5 10 15 25 50 75 100 150	14.2 11.6 10.0 8.16 6.34 4.48 3.66 3.16 2.58 2.00 1.42 1.16 1.00 0.816	\$9.75 9.75 9.75 9.75 9.75 9.75 9.10 9.10 9.10 9.10 9.10 9.10
0112 0113 0114 0115 0116 0117 0118	150 250 500 750 1000 1500 2500	0.258 0.200 0.142 0.116 0.100 0.081 0.03	3.85 3.85 3.85 3.85 3.92 3.92 3.92	0214 0215 0216 0217 0218 0219 0220 0221	150 250 500 750 1000 1500 2500 5000	0.408 0.316 0.222 0.182 0.158 0.129 0.100 0.070	4.20 4.20 4.20 4.20 4.90 4.90 4.90 4.90	0315 0316 0317 0318 0319 0320 0321 0322 0323	250 500 750 1000 1500 2500 5000 7500	0.488 0.316 0.258 0.222 0.182 0.141 0.100 0.082 0.070	5.85 5.85 6.18 6.18 6.18 6.18 6.50 6.50	0415 0416 0417 0418 0419 0420 0421 0422 0423	250 500 750 1000 1500 2500 5000 7500	0.634 0.448 0.366 0.316 0.258 0.200 0.141 0.115 0.100	9.10 9.10 9.10 9.75 9.75 9.75 10.40 11.05 11.70

*Thru all or any part of winding. Diameter: 134". Depth Behind Panel: 34". Mounting: Single 36" Diameter Hole. Standard Bushing for Panels up to 3/16".

*Thru all or any part of winding.

Diameter: 15%".
Depth Behind Panel: 13%".
Mounting: Single 3%" Diameter

Hole.
Standard Bushing for Panels up to 3/16".

*Thru all or any part of winding. Diameter: 21/4". Depth Behind Panel: 1". Mounting: Single 3/6" Diameter

Hole.
Standard Bushing for Panels up to 3/16".

*Thru all or any part of winding. Diameter: 31/8". Depth Behind Panel: 13/4". Mounting: Single 3/8" Diameter

Hole. Standard Bushing for Panels up

TY	PE D-150 V	VATT RHEOS	TAT	TY	PE E-300 V	VATT RHEOS	TAT	TY	PE F-500 \	WATT RHEOS	TAT
Stock No.	Total Ohms	Max. Amps*	List Price	Stock No.	Total Ohms	Max. Amps*	List Price	Stock No.	Total Ohms	Max. Amps*	List Price
0501	0.50	15.00	\$12.35	0601	1.0	17.25	\$17.55	0701	1.0	22.3	\$25.35
0502	0.75	14.10	12.35	0602	1.5	14.15	17.55	0702	1,5	18.2	25.35
0503	1.00	12.25	12.35	0603	2.5	10.95	17.55	0703	2.5	14.1	25.35
0504	1.5	10.00	12.35	0604	5.0	7.75	17.55	0704	5.0	10.0	
0505	2.5	7.75	12.35								25.35
0506	5.0	5.48	12.35	0605	7.5	6.32	17.55	0705	7.5	8.17	25.35
0507	7.5	4.47	12.35	0606	10	5.48	17.55	0706	10	7.07	25.35
0508	10	3.88	11.70	0607	15	4.47	17.55	0707	15	5.77	25.35
0509	15	3.16	11.70		25			0708			
0510	25	2.45	11.70	0608		3.46	17.55		25	4.47	25.35
0511	50	1.73	11.70	0609	50	2.45	17.55	0709	50	3.16	25.35
0512 0513	75 100	1.41 1.22	11.70 11.70	0610	75	2.00	17.55	0710	75	2.58	25.35
0514	150	1.00	11.70	0611	100	1.73	17.55	0711	100	2.23	25.35
0515	250	0.775	11.70	0612	150	1.41	17.55	0712	150	1.82	25.35
0516	500	0.548	11.70	0613	250	1.09	17.55	0713	250	1.41	25.35
0517	750	0.447	12.35	0614	500		17.55	0714			
0518	1000	0.388	12.35	11		0.775			500	1.00	25.35
0519	1500	0.316	12.35	0615	750	0.633	17.55	0715	750	.817	25.35
0520	2500	0.245	13.00	0616	1000	0.548	17.55	0716	1000	.707	25.35
0521 0522	5000 7500	0.173 0.141	13.65 14.30	0617	1500	0.449	17.55	0717	1500	.577	25.35
0523	10000	0.122	15.60	0618	2500	0.346	17.55	I .	2500		
0323	10000	0.122	13.00	0018	2300	0.346	17.55	0718	2500	.447	25.35

*Thru all or any part of winding.
Diameter: 4". Depth Behind Panel: 134".
Mounting: Single 3%" Diameter Hole. Standard Bushing for Panels up to 14" or 2
6-32 Screws, Each 7%" from Center of Shaft.

*Thru all or any part of winding. Diameter: 6". Depth Behind Panel: 21/4". Mounting: 2 1/4-20 Screws, Each 1-3/16" from Center of Shaft.

*Thru all or any part of the winding. Diameter: 8". Depth Behind Panel: 2½". Mounting: 2 ¼-20 Screws, Each 1½" from Center of Shaft.

RATING—CURRENT RATINGS SHOWN FOR ALL RHEOSTATS ARE FOR USE IN FREE AIR. WHEN UNITS ARE ENCLOSED VALUES SHOULD 8E REDUCED ABOUT 50%.

DATA ON NON-STOCK RHEOSTATS—SPECIAL SHAFTS AND BUSHINGS; VALUES INTERMEDIATE TO THOSE LISTED; TAPERED WINDINGS; TANDEM ASSEMBLIES, ETC., FURNISHED UPON REQUEST.



R-68

ARDWICK-HINDLE I



FIXED VITREOUS ENAMELED RESISTORS WITH MOUNTING BRACKETS

Five stock sizes fill a great variety of applications.

Ratings are in accordance with NEMA standards, being based on a temperature rise of 250° C. in free air.

Data on types, sizes and values not listed herein, and for resistors with intermediate taps, special mountings, etc., furnished upon request.



						TABL	E OF KA	1114.03						
2′′	5 WATT SI Type 2P5 Long x 5/8" nting Centers	O.D.	31/2'	0 WATT SI Type 3½L5 Long x 3/4' unting Cente	O.D.	61/2"	0 WATT SI Type 6½L5 Long x ¾ Inting Cente	O.D.	81/2"	60 WATT SI Type 8½FX Long x 1½° nting Center	5 ' O.D. s 9 ³ / ₈ ''	10½'' Moun	IZE 5 " O.D. 11%"	
Stock No.	Ohms	List Price	Stock No.	Ohms	List Price	Stock No.	Ohms	List Price	Stock No.	Ohms	List Price	Stock No.	Ohms	List Price
1001 1002 1003 1004 1005 1006 1007 1008 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023	5 10 25 50 75 100 150 200 250 500 750 1500 2500 3500 4000 5000 6000 7500 10000 12000	\$.800 .800 .800 .800 .800 .800 .800 .800	2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	5 10 25 50 75 100 150 200 250 500 750 1000 2500 2000 2500 4000 5000 12500 12500 12500 12500 22000	\$1.37 1.37 1.37 1.37 1.37 1.37 1.37 1.37	3001 3002 3003 3004 3005 3006 3007 3009 3010 3011 3012 3013 3014 3015 3016 3017 3019 3020 3021 3022 3023	5 10 25 50 75 100 250 500 1000 1500 2500 3000 4000 5000 10000 15000 25000 25000 30000 35000 40000 25000	\$2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.08 2.08 2.08 2.08 2.08 2.25 2.25 2.47 2.67 2.67 2.67 2.67	4001 4002 4003 4004 4005 4006 4007 4009 4010 4011 4012 4013 4014 4015 4016 4017 4018 4019 4020 4021 4022 4023 4024	5 10 25 50 75 100 150 250 500 750 1000 1500 2000 2500 3000 7500 10000 15000 25000 30000 25000 30000 40000 50000	\$3.47 2.48 2.48 2.48 2.48 2.48 2.48 2.48 2.53 2.53 2.53 2.53 2.53 2.75 2.75 2.75 2.95 3.03 3.03 3.03 3.13	5001 5002 5003 5004 5005 5006 5007 5008 5009 5010 5013 5014 5015 5016 5017 5018 5019 5020 5021 5022 5023 5023	5 10 25 50 75 100 150 250 500 750 1000 1500 2500 3000 5000 7500 15000 25000 3000 3000 3000 5000 75000 5000	\$3.75 2.70 2.70 2.70 2.70 2.70 2.70 2.70 2.70
1025 1026	20000 25000	1.00 1.13	2025 2026	35000 50000	1.95 2.14	3025 3026	60000 75000	2.81 3.00	4025 4026	75000 100000	3.55	5026	100000	3.75

TARLE OF RATINGS

ADJUSTABLE VITREOUS ENAMELED RESISTORS WITH MOUNTING BRACKETS

Embodying features originated by Hardwick, Hindle, Inc., resulting in a Resistor possessing the many advantages of Vitreous Enamel Construction, plus an adjustable feature.

The winding is closely and evenly spaced, assuring ample insulation between turns. Where the winding appears exposed in the track, its underside is tightly embedded in the enamel, the upper surface only being exposed for contact with the adjustable band.

All sizes of Adjustable Resistors listed herein are furnished complete with mounting brackets and with one adjustable contact band.



							TAB	LE OF	RATII	1G2							
2" Lo	WATT S ype K-25 ng x 5/8" . Centers	O.D. 2½''	4½'' l Moui	WATT S ype K-5 .ng. x 5/8 nt. Cente	0 '' O.D. rs 5''	6" Lo Mount	WATT S Type K-7 ong x 5/8' . Center	5 ' O.D. s 6 ¹ /2''	6 ¹ /2" Moun	ype K-10 Lng.x11/8 t. Centers	00 '' O.D. s 7 ³ '8''	8½"	WATT S ype K-16 Lng. x 11/8 t. Centers	0 '' O.D.	T 101/2''	ype K-20 Lng.x11/e . Centers	00 3'' O.D.
6001 6002 6003 6004 6005 6006 6007 6008 6009 6011 6013 6014 6015 6016 6017 6018 6018	1 2 3 5 10 20 25 5 50 75 100 200 300 400 750 800 1250 1250 1250	\$1.56 1.56 1.56 1.56 1.56 1.56 1.56 1.56	7001 7002 7003 7004 7005 7006 7007 7008 7010 7011 7012 7013 7014 7015 7016 7017 7018	5 100 25 50 75 100 200 250 300 400 750 800 1500 2000 4000 4000 5000	\$1.97 1.97 1.97 1.97 1.97 1.97 1.97 1.97	8001 8002 8003 8004 8005 8007 8009 8010 8011 8012 8013 8014 8015 8017 8018 8019 8020	5 10 15 25 5 50 200 300 400 500 750 2000 2500 3000 4000 5000 5000 5000 5000 7000	\$2.27 2.27 2.27 2.27 2.27 2.27 2.27 2.27	9001 9002 9003 9004 9006 9007 9008 9010 9011 9012 9013 9014 9015 9017 9019 9019	5 10 25 50 1000 250 500 1000 1500 2500 10000 25000 25000 40000 50000 75000 10000	\$2.97 2.97 2.97 2.97 2.97 2.97 2.97 3.05 3.05 3.05 3.42 3.42 3.64 3.64 3.64 3.79 4.13	9031 9032 9033 9034 9035 9036 9037 9038 9039 9041 9042 9043 9044 9045 9046 9049	15 25 50 100 250 500 1000 15000 5000 15000 25000 25000 25000 30000 40000 50000 15000	3.45 3.45 3.45 3.45 3.45 3.50 3.50 3.50 3.70 3.92 3.92 4.00 4.00 4.00 4.00 4.00 4.53	9061 9062 9063 9064 9065 9066 9067 9079 9070 9071 9072 9073 9074 9075 9076 9077	10 25 50 100 250 500 1000 1000 1000 15000 25000 30000 40000 75000 100000	3.64 3.64 3.64 3.64 3.70 3.70 3.70 4.12 4.12 4.20 4.20 4.30 4.53 4.72
6021 6022 6023	2500 3000 3500	1.58 1.58 1.58	7021 7022 7023	7000 7500	2.19 2.19 2.19	8021 8022 8023	7500 10000 15000	2.50 2.50 2.65			ADJU	STABL	E CON	TACT	BAND	s	
6024 6025 6026	4000 5000 6000	1.58 1.58 1.70	7024 7025 7026	9000 10000	2.19 2.19 2.19	8024 8025	20000 25000	2.65 2.92		SCREW			neter of sistor		Stock No.	Р	List rice
6027 6028	7000 8000	1.70 1.70	7027 7028 7029	12000 15000 20000	2.36 2.36 2.36	8026 8027	30000 40000	2.92 2.92	17 18	TYPE			5/8'' 1/8''		1791-6 1793-4		.25
6029 6030 6031	10000 15000 20000	1.70 1.75 1.75	7030 7031 7032	25000 30000 40000	2.55 2.55 2.55	8028 8029 8030	50000 60000 80000	3.00 3.00 3.28		BAKELI1 TYPE KNOB	rE		5/8'' 1/8''		791-6-X 793-4-X		.30 .40
6032	25000	1.89	7033	50000	2.75	8031	100000	3.61					22				

TABLE OF BATINGS

SCREW	Diameter of	Stock	List
	Resistor	No.	Price
TYPE	5/8"	1791-6	.20
	11/8"	1793-4	.25
BAKELITE TYPE KNOB	5/8'' 11/8''	1791-6-X 1793-4-X	.30 .40



HARDWICK-HINDLE INC.





The standard method of mounting Blue Ribbon Resistors is by means of an aluminum thru-bar, which is in intimate

aluminum thru-bar, which is in intimate contact with the entire internal surface of the ceramic core. The presence of this thru-bar distributes the heat generated by the Resistor uniformly along its entire length, substantially spreading the hot spot normally encountered in tubular resistors with conventional mounting. Mounting studs riveted to the ends of the thru-bar further tend to conduct the heat to the mounting surfaces. These mounting studs are also designed to act as spacers when two or more units are stacked.

In comparison with tubular units of equivalent wattage rating Blue Ribbon Resistors have the following advantages: Higher wattage rating per unit space requirement. Substantial reduction in depth behind mounting surface. Ease and economy of mounting—either singly or stacked. Lower Inductance. Light weight. Resistor and mounting integral unit; cannot rotate or become loose.

BLUE RIBBON RESISTORS

TABLE OF RATINGS

30	YPE 1¼" Watt Rat iting Cent	ing*	40	TYPE 2" Watt Rat ing Cente	ing*	55	YPE 3½'' Watt Rati ing Cente	ing*	75	TYPE 6" Watt Rati	ing*
Stock No.	Ohms	List Price	Stock No.	Ohms	List Price	Stock No.	Ohms	List Price	Stock No.	Ohms	List Price
B101	5	\$1.53	B201	5	\$1.61	B301	5	\$1.85	B601	5	\$2.30
B102	10	1.53	B202	10	1.61	B302	10	1.85	B602	10	2.30
B103	15	1.53	B203	15	1.61	B303	15	1.85	B603	15	2.30
B104	25	1.53	B204	25	1.61	B304	25	1.85	B604	25	2.30
B105	50	1.53	B 205	50	1.61	B305	50	1.85	B605	50	2.30
B106	100	1.53	B206	100	1.61	B306 B307	100	1.85	B606	100	2.30
			B207	150	1.61	B307	150 250	1.85 1.85	B607 B608	150 250	2.30
B1C7	150	1.53	B208	250	1.61	B309	500	1.85	B609	500	2.30 2.30
E108	250	1.53	B209	500	1.61	B310	1000	1.85	B610	1000	2.30
B109	500	1.53	B210	1000	1.61	B311	1500	1.85	B611	1500	2.30
B110	1000	1.53	B211	1500	1.61	B311	2500	1.85	B612	2500	2.30
E111	1500	1.53	B212	2500	1.61	E313	5000		B613	5000	2.41
E112	2500	1.53	B213	5000	1.72	B314		1.96	B614	10000	2.61
£113	5000	1.65	B214	10000	1.93	B314	10000	2.17	B615	15000	2.70
6114	10000		B215				15000	2.26	B616	25000	2.93
6114	10000	1.65	8213	15000	2.02	B316	25000	2.48	B617	50000	3.30

*This rating based on a maximum temperature rise of 250 degrees C. with the Resistor mounted horizontally on a $10^{\prime\prime}$ x $10^{\prime\prime}$ x $.040^{\prime\prime}$ steel plate supported horizontally $1/2^{\prime\prime}$ above a wooden surface.

When Resistors are mounted on a non-metallic base the nominal watt rating should be reduced by approximately 15%.

All stock numbers in each type listed above are available with adjustable feature complete with one movable contact band.

10 and 20 WATT FIXED VITREOUS ENAMELED RESISTORS

Designed particularly for radio service and replacement use—conservatively rated—wound upon Steatite Tube—combination lug and pigtail terminal connections—Hardwick, Hindle vitreous



enamel insulation, insuring permanence of value and proof against moisture. 10 watt and 20 watt sizes available in the range of resistance values shown.

TABLE OF RATINGS

			VATT × 38" O.D.			20 WATT 2" Long x ½" O.D.								
Stock No.	Ohms	List Price	Stock No.	Ohms	List Price	Stock No.	Ohms	List Price	Stock No.	Ohms	List Price			
A101 A102 A103 A104 A105 A106 A107 A108 A109 A110 A111 A112 A113 A114	1 3 5 7.5 10 15 25 50 75 100 150 200 250 400	\$.58 .58 .58 .58 .58 .58 .58 .58 .58 .58	A119 A120 A121 A122 A123 A124 A125 A126 A127 A128 A129 A130 A131	1500 2000 2500 3000 4000 5000 7500 10000 12500* 15000* 20000*	\$.63 .63 .63 .63 .63 .72 .72 .72 .80 .80 .80	A201 A202 A203 A204 A205 A206 A207 A208 A209 A210 A211 A212 A213 A214	5 10 25 50 75 100 150 200 250 400 500 750 1000	\$.75 .75 .75 .75 .75 .75 .75 .75 .75 .75	A219 A220 A221 A222 A223 A224 A225 A226 A227 A228 A229 A230 A231	4000 5000 6000 7500 10000 12500 25000* 35000* 40000* 60000*	\$.78 .78 .88 .88 .88 .94 .94 1.08 1.08 1.25			
A115 A116	500 750	.58 .58	A132 A133	35000* 40000*	.97 .97	A215 A216	1500 2000	.78 .78	A232 A233	70000* 75000* 80000*	1.46 1.46 1.46			
A117 A118	1000 1250	.58 .63	A134 A135	45000* 50000*	.97 .97	A217 A218	2500 3000	.78 .78	A234 A235	90000* 100000*	1.69			

^{*} Low Temperature Enamel.

In addition to the standard line of resistor and rheostat products, which are in stock for immediate shipment, Hardwick, Hindle, Inc., is always pleased to receive orders for made to order products, such as, Non-inductive vitreous enameled resistors, Radio frequency chokes, Power line chokes and Soldering Iron controls. Non-inductive resistors are available in three standard sizes; 25,

50 and 100 watt.
Radio frequency chokes and Power line chokes are also available in three standard sizes.

in three standard sizes.

Soldering iron controls and Photographic lamp controls are made to order in ten different sizes.

Data on the above products can be furnished upon request.

MADE TO ORDER PRODUCTS

^{*} Low Temperature Enamel.

Thank You!

When writing for additional information or when ordering from sources of supply listed in this book, please mention

RADIO'S MASTER



CONSTRUCTION: Single conductor, extra flexible stranded tinned copper, cotton serve, insulated with special low loss SIC rubber compound, braided tinned copper shield, cotton serve, tough black rubber jacket overall.

CRYSTAL MICROPHONE CABLE

GENERAL PURPOSE: Low loss design for use with crystal, ribbon. dynamic and velocity microphones, photo-electric cells. Use No. 1248 FOR LAPEL MICROPHONES and phonograph pickups.

No.	Put-up	Size	Strond	Mox. Capocity Per Ft. Between Cond. & Shield	O.D.
1248	100 Ft. Spool	20	26/34	40 mmf.	.175"
1249	100 Ft. Speel	20	26/34	30 mmf.	.245"



CONSTRUCTION: Each conductor flexible stranded tinned copper, cotton wrap, 1/64" "Hi-Tension" low capacity rubber, color coded, conductors twisted, cushioned with cotton fillers, braided tinned copper shield, cotton weap, tough black rubber jacket overall.

SHIELDED MICROPHONE CABLE

GENERAL PURPOSE: Adaptable for all indoor and outdoor crystal, carbon and condenser microphones as well as public address systems.

No.	Put-up	Size		Per Ft.	Between & Shield	Conds.	Q.D.
1250	100 Ft. Spool	20	2	70	mmf.	38 mmf.	.270"
1250/18	100 Ft. Spool	18	2	75	mmf.	40 mmf.	.300"
1251	100 Ft. Spool	20	3	65	mmf.	38 mmf.	.305"
1252	100 Ft. Spool	20	4	65	mmf.	36 mmf.	.345"
1253	100 Ft. Spool	20	5	60	mmf.	32 mmf.	.350″
1254	100 Ft. Spool	20	6	60	mmf.	30 mmf.	.375"
1255	100 Ft. Spool	20	7	60	mmf.	30 mmf.	.380"
1255/8	100 Ft. Spool	20	8	60	mmf.	30 mmf.	.400"



CONSTRUCTION: Each conductor No. 20-10/30 stranded tinned copper, 1/64" rubber, color coded cotton braid, conductors twisted, tinned copper shield overall.

1262—1263—1264—Same specifications except with cotton braid over shield.

SHIELDED MULTIPLE CONDUCTOR CABLE

GENERAL PURPOSE: For indoor permanent or portable P.A. systems, photo electric cell circuits, sound recording and auto radios.

TINNED SHIELD OVERALL

	_	Conduc-	Per Ft. Bet		
No.	Put-up	tors	Cond. & Shield	Conds.	O.D.
1256	100 Ft. Spool	2	60.5 mmf.	32 mmf.	.215"
1257	100 Ft. Spool	3	54.0 mmf.	29 mmf.	.240"
1258	100 Ft. Spool	4	48.0 mmf.	26 mmf.	.270"

COTTON BRAID OVER SHIELD

1262	100 Ft. Spool	2	60.5 mmf.	32 mmf.	.225"
1263	100 Ft. Spool	3	54.0 mmf.	29 mmf.	.245"
1264	100 Ft. Speel	4	48.0 mmf.	26 mmf.	.275"



CONSTRUCTION: Two conductors twisted, each #24 16/36 tinned copper, .015" vinyl insulation, color coded, very fine tinned copper shield overall.

SHIELDED TWISTED PAIR CABLE

GENERAL PURPOSE: Where small diameter is required for sound recording, photo electric cell circuits, public address systems, etc.

d copper shield	No.	Put-up	Conductors	O.D.
	1261	1000 Ft. Spool	2	.115"
ALL PRICES AND SPEC	FICATIONS SUBJE	CT TO CHANGE WITHOUT NOTICE.		

SHIELDED DUPLEX SPEAKER CABLE

GENERAL PURPOSE: For P.A. systems, photo-electric cell circuits, master control sound systems, etc.

TINNED SHIELD OVERALL

			Maximum Cape Betwe		
No.	Put-Up	Conductors	Cond. & Shield	Conds.	O.D.
1265	500 Ft. Spool	2	65 mmf.	23 mmf.	.250"
	WAXED	COTTON	BRAID OVER	SHIELD	
1266	500 Ft. Spool	2	65 mmf.	23 mmf.	.280"



CONSTRUCTION: Two conductors twisted, each No. 18-16/30 stranded tinned copper, 1/32" "Hi-Tension" rubber, color coded, paper wrap over both conductors, close tinned copper shield overall.

CONSTRUCTION: Same as #1265 except with waxed cotton braid over shield.

SHIELDED TRANSMISSION LINE

GENERAL PURPOSE: For inter-communication, short wave, P.A. systems, etc.

TINNED	SHIELD	OVERALL
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No.	Put-up	Max. Capacity Per Ft.	0.D.
1267	500 Ft. Spool	25 mmf.	.135"
٠	WAXED COTTON	BRAID OVER SHIELD	
1268	500 Ft Speel	25 mmf.	.165"

Surge impedance is one-half the above when using shield as common conductor in dual transmission line.

CONSTRUCTION: Two tors twisted, each No. 20 solid tinned enameled copper, insulated, color coded, shielded braid overall.

CONSTRUCTION: Same as #1267 except with waxed cotton braid over shield.

ARMORED DUPLEX SPEAKER CABLE

GENERAL PURPOSE: For P.A. systems, oil burner installations, automotive wiring, etc.

No.	Put-up	O.D.
1272	500 Ft. Spool	.132" x .182"

CONSTRUCTION: Two conductors parallel, each No. 18-16/30 stranded tinned copper, rubber insulated, color coded, lacquered cotton braid, galvanized steel armor overall.

INTER-COMMUNICATION CABLE

3 CONDUCTORS

(1 SHIELDED - 2 UNSHIELDED)

GENERAL PURPOSE: This cable is ideal for general wiring from station to station where a shielded single conductor is essential to eliminate cross talk.

No.	Put-up	O.D.
1242	500 Ft. Spool	.155"

CONSTRUCTION: Three conductors, each conductor No. 22 stranded tinned copper wire, vinyl plastic insulation, color coded; one conductor tinned copper shield and two conductors unshielded; cotton braid over-

LEAD SHEATHED CABLE

GENERAL PURPOSE: For P.A. systems, communications, traffic control, mines, railroads and many other uses where severe moisture conditions are encountered. For all outdoor use including underground and underwater.

No.	Put-up	O.D.	color coded;
1271	1,000 Ft. Reel	.325"	sheath.
	ALL PRICES AND SPECIFICATION	NS SUBJECT TO CHANGE	WITHOUT NOTICE.



CONSTRUCTION: Two conductors twisted, each No. 19 solid tinned copper, 1/32" "Hi-Tension" rubber, color coded; overall is a pure lead sheath.



CONSTRUCTION: Each conductor solid tinned copper wire, two cotton reverse serves paraffined, color coded, conductors twisted into pairs, then covered with an impregnated double paper wrap, and overall a cotton braid saturated with a moisture-proof, flame retarding, rodent-proof compound.



(TWISTED PAIRS)

GENERAL PURPOSE: For interior use designed for connecting inter-communication systems, annunciators, telephones, etc.

No.	Put-up	Size	Pairs	O.D.
1276/2	1,000 Ft. Reel	22	2 (4 Conductors)	.185"
1276/3	1,000 Ft. Reel	22	3 (6 Conductors)	.210"
1276	1,000 Ft. Reel	22	6 (12 Conductors)	.240"
1277	1,000 Ft. Reel	22	10 (20 Conductors)	.300"
1277/13	1,000 Ft. Reel	22	13 '(26 Conductors)	.360"
1277/15	1,000 Ft. Reel	22	15 (30 Conductors)	.380"
1277/25	1,000 Ft. Reel	22	25 (50 Conductors)	.445"



CONSTRUCTION: Similar to Communication System Cable above, but with lead antimony sheath instead of cotton braid over the twisted pairs.

LEAD-COVERED COMMUNICATION CABLE

(TWISTED PAIRS)

GENERAL PURPOSE: For use indoors, outdoors, underground and in pipes for connecting inter-commnication systems, annunciators, telephones, etc.

No.	Put-up	Size	Pairs	O.D.
1289	1,000 Ft. Reel	22	6 (12 Conductors)	.375"
1291	1,000 Ft. Reel	22	10 (20 Conductors)	.450"
1293	1,000 Ft. Reel	22	15 (30 Conductors)	.510"
1295	1,000 Ft. Reel	22	25 (50 Conductors)	.560"

CONSTRUCTION: Each conductor solid bare copper wire, thermo-plastic insulation, color coded, conductors twisted, waxed cotton braid overall.

INTER-COMMUNICATION CABLE

(BRAIDED)

GENERAL PURPOSE: Designed for interior use for connecting inter-communication systems, annunciators, thermostat controls of oil burners, air conditioners, etc.

No.	Put-up	Size	Conductors	Q.D.
1274	500 Ft. Spool	18	2	.150"
1275	500 Ft. Spool	18	3	.165"
1275/4	500 Ft. Spool	18	4	.180"
1275/5	500 Ft. Spool	18	5	.200"
1275/6	500 Ft. Spool	18	6	.220"



CONSTRUCTION: Each conductor 19 solid tinned copper, 1/64" telephone compound rubber, heavy cotton braid with specially treated compound to make it weather-proof for resistance against rain, snow, hail and cold.

OUTDOOR INTER-COMMUNICATION WIRE

GENERAL PURPOSE: For outdoor and indoor use or in any damp location, for connecting communication systems, telephones, etc.

No.	Put-up	Size	Conductors	O.D.
1279	500 Ft. Spool	19	2	.200"
1280	500 Ft. Spool	19	3	.300"



CONSTRUCTION: Two conductors twisted, each No. 20 solid tinned topper, insulated, color coded.

UNSHIELDED TRANSMISSION LINE

GENERAL PURPOSE: For short wave, inter-communication, annunciator systems, etc., where shielding is not required.

No.	Put-up	O.D.	
1269	500 Ft. Spool	.125"	

MULTI-CONDUCTOR FLEXIBLE CABLE

(RUBBER JACKETED)

GENERAL PURPOSE: For indoor and outdoor speakers, permanent or portable P.A. systems, sound recording and auto radios.

No.	Put-up	Conductors	Capacity Per Ft. Between Conductors	O.D.
1244	100 Ft. Spool	2	22 mmf.	.250"
1245	100 Ft. Spool	3	20 mmf.	.300"
1246	100 Ft. Spool	4	18 mmf.	.320"
1247	100 Ft. Spool	5	17 mmf.	.370"
1247/6	100 Ft. Spool	6	16 mmf.	.400"
1247/8	100 Ft. Spool	8	16 mmf.	.460″



CONSTRUCTION: Each conductor No. 20-26/34 flexible stranded tinned copper, cotton wrap, 1/32" "Hi-Tension" rubber, color coded, conductors twisted, cushioned with cotten fillers, cotton wrap, tough black rubber jacket overall.

MULTI-CONDUCTOR FLEXIBLE CABLE

(COTTON BRAID)

GENERAL PURPOSE: For connecting speakers, analyzers, remote control units, P.A. systems or wherever a multiple circuit hook-up is required.

No.	Put-up	Conductors	Capacity Between Conductors	O.D.
1182	100 Ft. Spool	2	31.5 mmf.	.135"
1183	100 Ft. Spool	3	31.0 mmf.	.170"
1184	100 Ft. Spool	4	30.0 mmf.	.180″
1185	100 Ft. Spool	5	29.5 mmf.	.205"
1186	100 Ft. Spool	6	29.2 mmf.	.225"
1187	100 Ft. Spool	7	28.8 mmf.	.240"
1188	100 Ft. Spool	8	28.5 mmf.	.255"
1189	100 Ft. Spool	9	27.9 mmf.	.275"
1190	100 Ft. Spool	10	27.6 mmf.	.310"
1192	100 Ft. Spool	12	27.0 mmf.	.340"



CONSTRUCTION: Each conductor No. 20-10/30 stranded tinned copper, 1/64" thermoplastic insulation, color coded, conductors twisted, glazed brown cotton braid overall.

RUBBER SHEATHED SERVICE CORD

(UNDERWRITERS APPROVED)

GENERAL PURPOSE: For amplifiers, sound systems, speakers, vacuum cleaners, electric tools, washing machines, refrigerators, appliances, trouble lights, garage lamps or wherever a rough usage power line is required.

No.	Put-up	Size	Conduc	tors Type	Current Carrying Capacity	Voltage Rating	0.D.
1951	250 Ft. Spool	18	2	SV	5 amps	300	.250"
1952	250 Ft. Spool	18	2	SJ	5 amps	300	.310"
1953	250 Ft. Spool	16	2	SJ	7 amps	300	.340"
1954	250 Ft. Coil	18	2	S	5 amps	600	.390"
1955	250 Ft. Coil	16	2	S	7 amps	600	.410"
1956	250 Ft. Coil	14	2	S	15 amps	600	.540"
1957	250 Ft. Coil	12	2	S	20 amps	600	.605"
1958	250 Ft. Coil	10	2	S	25 amps	600	.640"
	Also Ava	ilabl	e with	Addition	al Conduc	tors.	



CONSTRUCTION: Each conductor stranded bare copper, cotton separator, 1/32" "Hi-Tension rubber, color coded, conductors twisted, cushioned with jute fillers, 40% tough rubber jacket overall.

TYPE POSJ-E-Z STRIP LAMP CORD

(UNDERWRITERS APPROVED)

GENERAL PURPOSE: For line cord on radios, lamps, electric clocks, food mixers and other small devices.

No.	Put-up	O.D.	
1966	100 Ft. Spool	.235" x .130"	
1967	250 Ft. Spool	.235" x .130"	

Standard Colors: Brown, Black and Ivory



CONSTRUCTION: Two conductors parallel, each conductor No. 18-41/34 extra flexible bare copper, color coded cotton serve, 40% tough rubber jacket overall. Slit in jacket to permit "E-Z" separation.



CONSTRUCTION: Very flexible tinned soft annealed copper, concentric strand, cotton wrap, 3/64" "Super Hi-Tension" rubber, satin finish.



CONSTRUCTION: No. 18 - 65/36 tinned soft annealed copper, concentric strand, cotton wrap, 7/64" "Super Hi-Tension" rubber, satin finish.

KINKLESS TEST LEAD WIRE

GENERAL PURPOSE: As test leads in analyzers, oscillators and all other types of testing apparatus or wherever an EXTRA FLEXIBLE insulated wire is required.

No.	Put-up	Size	Strond	D.C. Insulo- Voltoge tion Resistonce Breokdown Per Ft. I (60 Cycles) (Megohms) O		
1633	100 Ft. Spool	20	41/36			.140"
1635	500 Ft. Spool	20	41/36	10,000 V	710	.140"
1636	500 Ft. Spool	18	65/36	12,000 V	800	.150"

Heavy Duty Type

GENERAL PURPOSE: For television, therapeutic equipment, analyzers, oscillators, etc., or wherever a heavy duty EXTRA FLEXIBLE high voltage line is required.

No.	Put-up	Valtage Breakdown (60 Cycles)	D.C. Insulation Resistance Per Ft. (Megohms)	O.D.
1637	100 Ft. Spool	22,000 V.	Over 1,000	.245"
1638	500 Ft. Spool Stock Colors:	22,000 V. Red and B	Over 1,000 lack	.245"

TINNED COPPER SHIELDING

GENERAL PURPOSE: For shielding speaker leads, lead-ins, amplifier wires, auto radio installations. Also for bonding.

No.	Put-up	1.D.
1229	50 Ft. Spool	1/8"
1230	50 Ft. Spool	3/16"
1231	50 Ft. Spool	1/4"
1232	50 Ft. Spool	3/8"
1233	50 Ft. Spool	5/8"
1234	50 Ft. Spool	3/4"
1235	50 Ft. Spool	1"



CONSTRUCTION: Composed of very fine soft annealed tinned copper wires braided and rolled flat.

STATE OF THE STATE

CONSTRUCTION: No. 1200 - 24 gauge flexible stranded copper conductor, vinyl plastic insulation, close tinned copper shielded braid overall.

No. 1201 same as No. 1200 plus cotton braid over shield.

No. 1202 same as No. 1200 except two conductor with shield overall.

SHIELDED PHONO AND GRID WIRE

GENERAL PURPOSE: Extreme flexibility and limpness make this an ideal wire for phonograph pick-up arm cable and grid wire.

No.	Put-up	Insulation	Q.D.
1200	1000 Ft. Spool	.010"	-080"
1201	1000 Ft. Spool	.010"	.095"
1202	1000 Ft. Spool	.010"	.080" x .115"



CONSTRUCTION: Single conductor No. 20 · 10/30 stranded tinned copper, insulated with low loss rubber compound, white silk braid, tinned copper shield overall.

SHIELDED LOW LOSS CABLE

GENERAL PURPOSE: For auto radios, lead-ins, short wave receivers and for grid leads in the input stages of P.A. amplifiers.

No.	Put-up	Capacity Per Ft.	O.D.	
1241	100 Ft. Spool	26.6 mmf.	.225"	



CONSTRUCTION: Stranded tinned copper, low loss insulation, highly lacquered braid, close tinned copper shield overall.

SHIELDED HOOK-UP AND LEAD-IN WIRE

GENERAL PURPOSE: To reduce interference caused by motors, high tension wires, x-ray machines or other apparatus that radiates electrical impulses. Ideal for grid-lead use.

NO.	Put-up	Size	Strand	O.D.
1194/22	1000 Ft. Spool	22	7/30	.105"
1194	1000 Ft. Spool	20	10/30	.110"
1196	1000 Ft. Spool	18	16/30	.145"
1197	1000 Ft. Spool	16	26/30	.160"
1198	1000 Ft. Spool	14	41/30	.180″



SOLID

CONSTRUCTION: Single conductor, stranded and solid tinned copper wires with thermoplastic (Vinylite) insulation. High dielectric strength; 80°C (176 F) acid, alkali, oil and moisture resistant. Underwriters approved.

Standard Colors: Black, Red, Green, Yellow, Light Blue, Brown, White, Orange, Slate, Purple, Tan, Pink and Dark Blue

PLASTIC SRIR HOOK-UP WIRE

GENERAL PURPOSE: For radio, radar, electronic devices, transmitters, aircraft instruments, fluorescent fixtures, rectifiers, electrical toys, etc. Valt. D.C. Insu-

No.	Put-up	Size	Strand	Insula- tian (Break- dawn 60 cycles	latian Resi tance per i (Megahm	ft.
1551	1000 Ft. Spool	22	7/30	1/64"	8000	5000	.065"
1552	100 Ft. Spool	22	7/30	1/64"	8000	5000	.065"
1553	1000 Ft. Spool	20	10/30	1/64"	8000	5000	.072"
1554	100 Ft. Spool	20	10/30	1/64"	8000	5000	.072"
1555	1000 Ft. Spool	18	16/30	1/64"	8000	5000	.087"
1557	1000 Ft. Spool	16	26/30	1/64"	8000	5000	.100"
1561	1000 Ft. Spool	22	Solid	1/64"	8000	5000	.060"
1562	100 Ft. Spool	22	Solid	1/64"	8000	5000	.060"
1563	1000 Ft. Spool	20	Solid	1/64"	8000	5000	.066"
1564	100 Ft. Spool	20	Solid	1/64"	8000	5000	.066"

TYPE WL HOOK-UP WIRE

GENERAL PURPOSE: For aircraft instruments and lighting and power, radio, electronic devices, radar, transmitters, rectifiers, etc.

	COTTON B	Valt. Break- dawn	D.C. In lation Re tance pe	esis-		
No.	Put-up	Size	Strand	(60 cycles)		ms) O.D.
1480	1000 Ft. Spool	22	7/30	1000	200	.090"
1481	1000 Ft. Spool	20	10/30	1000	200	.100"
1482	1000 Ft. Spool	18	16/30	1000	200	.115"
1483	1000 Ft. Spool	16	26/30	1000	200	.130"
1484	1000 Ft. Spool	14	41/30	1000	200	.150"
1485	1000 Ft. Spool	12	65/30	1000	200	.170"

GLASS BRAID 1490 1000 Ft. Spool 7/30 1000 200 .085" 1000 Ft. Spool .095" 1491 20 10/30 1000 200 1000 Ft. Spool 16/30 200 .110" 1492 18 1000 26/30 1493 1000 Ft. Spool 1000 200 .125" 16 1494 1000 Ft. Spool 41/30 1000 200 .145" 1495 1000 Ft. Spool 12 65/30 1000 200 .165"

CONSTRUCTION: Single conductor, stranded tinned copper, vinyl plastic insulation, cotton or glass braid, lacquered, flame retarding and fungi proof.

(Specification JAN-C-76)

LACQUERED HOOK-UP AND LEAD-IN WIRE

(HIGH GLOSS LACQUERED BRAID)

CONSTRUCTION: Stranded tinned conductor, free stripping insulation, single braid highly lacquered. Bright colors.

Standard Colors: Black, Red, Green, Yellow, Blue, Brown, White

GENERAL PURPOSE: For point to point soldering connections on transformers, amplifiers, panel hook-up, etc., where a low loss dielectric is required. It is not a pushback wire but will strip easily. Valt. D.C. Insu-

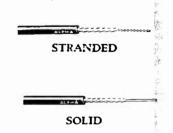
No.	Put-up	Size	Strand	Insula- tion	Break- down (60 cycles)	lation Resis tance per fi (Megahms	
1513	100 Ft. Spool	20	10/30	1/64"	7000	290	.090"
1515	500 Ft. Spool	20	10/30	1/64"	7000	290	.090"
1523	100 Ft. Spool	18	16/30	1/64"	7000	300	.110"
1525	500 Ft. Spool	18	16/30	1/64"	7000	300	.110"
1533	100 Ft. Spool	18	16/30	1/32"	8500	460	.125"
1535	500 Ft. Spool	18	16/30	1/32"	8500	460	.125"
1543	100 Ft. Spool	16	26/30	1/32"	8500	460	.140"
1545	500 Ft. Spool	16	26/30	1/32	8500	460	.140"

"CL" PUSHBACK WIRE

GENERAL PURPOSE: Pushback hook-up wire in various bright colors for circuit identification; radio, radar, electronics, electrical toys, etc.

Break- letton Posic.

No.	Put-up	Size	Strond	down (60 cycles)	tonce per ft. (Megohms)	
1460	1000 Ft. Spool	22	7/30	1000	200	.065"
1460Q	100 Ft. Spool	22	7/30	1000	200	.065"
1461	1000 Ft. Spool	20	10/30	1000	200	.070"
1461 Q	100 Ft. Spool	20	10/30	1000	200	.070"
1462	1000 Ft. Spool	18	16/30	1000	200	.082"
1462Q	100 Ft. Spool	18	16/30	1000	200	.082"
1463	1000 Ft. Spool	16	26/30	1000	200	.093"
1463Q	100 Ft. Spool	16	26/30	1000	200	.093"
1464	1000 Ft. Spool	14	41/30	1000	200	.105"
1464Q	100 Ft. Spool	14	41/30	1000	200	.105"
1465	1000 Ft. Spool	22	Solid	1000	200	.060"
1465Q	100 Ft. Spool	22	Solid	1000	200	.060"
1466	1000 Ft. Spool	20	Solid	1000	200	.065"
1466Q	100 Ft. Spool	20	Solid	1000	200	.065"
1467	1000 Ft. Spool	18	Solid	1000	200	.075"
1467Q	100 Ft. Spool	18	Solid	1000	200	.075"
1468	1000 Ft. Spool	16	Solid	1000	200	.085"
1468Q	100 Ft. Spool	16	Solid	1000	200	.085"
1469	1000 Ft. Spool	14	Solid	1000	200	.095"
1469Q	100 Ft. Spool	14	Solid	1000	200	.095"



CONSTRUCTION: Single conductor, stranded and solid tinned copper, heavy wrap of cellulose acetate, cotton braid with flame-retarding lacquer.

Standard Colors: Black, Red, Green, Yellow, Blue, Brown, White and Orange

LACQUERED PRIMARY WIRE

GENERAL PURPOSE: For automobile head, tail, side, dashboard lamps, horn, spotlight, instrument leads and general high voltage and primary voltage applications.

No.	Put-up	Size	Strond	Rubber	O.D.
1989	100 Ft. Spool	18	16/30	1 ' 64"	.110
1991	100 Ft. Spool	18	16/30	1/32"	.125"
1995	100 Ft. Spool	16	26/30	1/32"	.140"
1997	100 Ft. Spool	14	41/30	1/32"	.170"
1999	100 Ft. Spool	12	19/25	1/32"	.190"
1983	100 Ft. Spool	10	19/23	1/32"	.208"



CONSTRUCTION: Stranded soft annealed tinned copper, insulated with rubber, over which is a highly lacquered braid. Oil, heat, and moisture resistant.

7 MM LACQUERED CABLE

GENERAL PURPOSE: For high voltage leads in television receivers, cathode-ray tubes, oscilloscopes, etc.

No.	Put-up	O.D.	
1981	100 Ft. Spool	.275"	



CONSTRUCTION: Single conductor No. 16-19/29 stranded tinned copper, rubber insulated, cotton braid highly lacquered.

7MM SHIELDED IGNITION CABLE

GENERAL PURPOSE: For automotive and aircraft ignition systems requiring grounding to overcome interference.

No.	Put-up	O.D.
1193	100 ft. spool	.300"

CONSTRUCTION: Single conductor No. 16-19/29 stranded tinned copper, rubber insulated, cotton braid highly lacquered, braided tinned copper shield overall.



CONSTRUCTION: Two conductors parallel, each conductor 7/28 bare copper flexible stranding, low loss polyethylene plastic insulation, smooth satin finish. Standard color: brown.

TELEVISION AND FM TWIN-LEAD CABLE

GENERAL PURPOSE: For use especially in television and FM as the lead-in from the antenna to the receiver.

No.	Put-up	(Ohms)	Capacity Per Ft.		0.1) .
1150	1000 Ft. Spool	300	4.5 mmf.	.070"	х	.395"
1151	1000 Ft. Spool	150	9.5 mmf.	.060"	x	.190"
1152	1000 Ft. Spool	75	20.0 mmf.	.070"	x	.120"



CONSTRUCTION: Conductors flat parallel, each conductor 7/30 stranded copper with one conductor bare and other conductors tinned. Durable rubber insulation.

ROTARY TV-FM CABLE

GENERAL PURPOSE: Designed for use with TV or FM antenna

No.	No. Put-up		O.D.		
1150, 3	1,000 Ft. Spool	3	.085" x .265		
1150 4	1,000 Ft. Spool	4	.085" x .345"		



CONSTRUCTION: Stranded galvanized steel wires with great tensile strength.

GUY WIRE

GENERAL PURPOSE: To prevent sway of F.M., T.V. and radio receiver masts, poles or towers.

No.	Put-up	Strand	Breaking Strength	O.D.
1168	1,000 Ft. Spool	6/18	650 Lbs.	.156"
1169	1,000 Ft. Spool	6/20	470 Lbs.	.105"
1170	100 Ft. Coil	6/20	470 Lbs.	.105"
1171	50 Ft. Coil	6/20	470 Lbs.	.105"



CONSTRUCTION: Single conductor No. 22 solid copperweld, polyethylene insulation, bare copper shield, black vinyl plastic jacket overall.

CO-AXIAL CABLE (RG-59U)

GENERAL PURPOSE: Co-axial cable is ideal for television, FM and facsimile reception. Is suitable for very high frequency and ultra high frequency ranges.

		Nom. Imp.	Mox. Oper.		
No.	Put-up	(Ohms)	Nom. Cop.	Volts RMS	O.D.
1157	1000 Ft. Reel	73	21 mmf./F+	2300	.242"



CONSTRUCTION: 6 feet E-Z Strip cord (Type POSJ-64), molded-on rubber plug attached to one end, TV molded-on rubber connector attached to other end.

TELEVISION POWER CONNECTOR CORD

GENERAL USE: For replacement of worn out or damaged TV cords.

No.	Length
2126	6 Ft. Cord

ALPHA E-Z STRIP LINE CORD



This is the modern and ideal power supply cord for replacement on radios, lamps, fans, etc. It is made of E-Z strip rub-ber parallel cord (UN-**DERWRITERS APPRO-**

VAL) with a small unbreakable soft rubber attachment plug. Free end stripped and tinned ready to attach.

2106 - 6 Ft.

No.

2109 - 9 Ft.

No. 2112 - 12 Ft.

Cords Available in Any Length

GLASS INSULATOR



Will withstand great strain.

No. 2020

Per Corton 100

NAIL KNOB



A 2 piece knob of glazed porcelain and a heavy nail for secure holding.

No. 2031 Per Carton 100

AERIAL KITS

Alpha Aerial Kits are designed to meet the requirements of the various types of radio installations. Each kit is complete and boxed attractively.

No. 301

50 Ft. 7 Strond Copper Aeriol

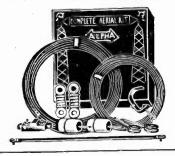
25 Ft. Leod-in Wire

2 No. 2022 Insulators

2 No. 2031 Nail Knobs 1 No. 2012 Ground Clamp

1 No. 2002 Leod-in Strip

75 Ft. 7/24 Copper Aeriol Wire 25 Ft. Lead-in Wire 1 No. 2001 Lightning Arrester 1 No. 2002 Lead-in-Strip 2 No. 2031 Noil Knobs 1 No. 2012 Ground Clamp 2 No. 2012 Ground Clamp 2 No. 2022 Insulators



PHOSPHOR BRONZE AERIAL WIRE

GENERAL PURPOSE: Recommended especially for ship, short wave and transmitting aerials where high tensile strength is required.

No.	Put-up	Strond	Breaking Strength	O.D.
1160	500-Ft. Spool	7/22	420 Lbs.	.075"
1161	500 Ft. Spool	7/20	650 Lbs.	.100"
1163	500 Ft. Spool	7/18	1000 Lbs.	.122"
1164	500 Ft. Spool	7/16	1600 Lbs.	.150"
1165	500 Ft. Spool	7/14	2140 Lbs.	.190"
1166	500 Ft. Spool	7/12	3670 Lbs.	.240"



CONSTRUCTION: 7 strands Phosphor Bronze.

LEAD-IN AND GROUND WIRE

GENERAL PURPOSE: Lead-in, ground, hook-up, all purpose wire.

No.	Put-up	Size	Strond	Insulation	O.D.
1114 1114E	1000 Ft. Spool 500 Ft. Spool 500 Ft. Spool	20 20 18	10/30 10/30 16/30	1/32" 1/32" 1/32"	.105" .105" .125"



CONSTRUCTION: Stranded tinned or solid tinned copper conductor, insulated with live free stripping rubber, jet black waxed finish overall.

COPPER AERIAL WIRE

9	TRANDE	D - BARE		SOLID .	ENAMEL
No.		Put-up	No.		Put-up
101	7/20	100 Ft. Coil 75 Ft. Coil	269	14	100 Ft. Coil
104 105	7/20 7/20	50 Ft. Coil	274	14	1000 Ft. Spool
106	7/20	1000 Ft. Spool	275	12	100 Ft. Coil
107	7/22	100 Ft. Coil	280	12	1000 Ft. Spool
110	7/22	75 Ft. Coil 50 Ft. Coil	281	10	100 Ft. Coil
111 112	7/22	1000 Ft. Spool	283	10	1000 Ft. Spool
131	7/24	100 Ft. Coil		SOLID	— TINNED
134	7/24	75 Ft. Coil	No.		Put-up
135	7/24	50 Ft. Coil 1000 Ft. Spool	284	14	100 Ft. Coil
136	7/24		286	14	1000 Ft. Spool
	TRANDED	Put-up	287	12	100 Ft. Coil
No.	7/22	100 Ft. Coil	289	12	1000 Ft. Spool
164	7/22	75 Ft. Coil	290	10	100 Ft. Coil
165	7/22	SO Ft. Coil	292	10	1000 Ft. Spool
166	7/22	1000 Ft. Spool			



All Alpha Aerial Wire is pure electrolytic copper properly annealed to assure required flexibility and tensile strength.

AC-DC ANTENNA WIRE

GENERAL PURPOSE: Ideal replacement wire for universal midgets, indoor aerials and loop antennas.

No.	Put-up
1281	25 Ft. Disc
1282	100 Ft. Spool
1283	500 Ft. Spool
1284	1000 Ft. Spool



CONSTRUCTION: Single conductor No. 24-16/36 stranded bare copper, extra flexible, covered with dark brown braid or plastic.

TINNED COPPER BUS-BAR WIRE

GENERAL PURPOSE: Winding of coils, antennas, point to point, bus bar, etc.

No.	Put-up	Size	O. D.
292	1000 Ft. Spool	10	.103"
289	1000 Ft. Spool	12	.082"
286	1000 Ft. Spool	14	.065"
295	1000 Ft. Spool	16	.051"
296	1000 Ft. Spool	18	.040"
297	1000 Ft. Spool	20	.033"
298	1000 Ft. Spool	22	.025"



DIATHERMY CABLE

GENERAL PURPOSE: Its extreme flexibility and tough rubber jacket give it long life. This cable is used as a lead on therapy apparatus, charging cable, battery lead, underground cable, etc.

No.	Put-up_	O.D.	
1623	100 Ft. Spool	.300"	00
1625	1000 Ft. Reel	.300"	



CONSTRUCTION: Single conductor extra flexible No. 14-104/34 copper, paper serve, 3/64" ASTM performance grade rubber, double cotton braid, .040" oil resistant neoprene rubber jacket.

TWISTED PAIR TRANSMISSION LINE

(WEATHERPROOF BRAID)

GENERAL PURPOSE: For inter-com. hook-up. Also suitable for low loss coupling between antenna and receiver as doublet style twisted lead-in.

No.	Put-up	Bet. Conds. Per Ft.	Frequency (KC)	Power Factor Per Cent	O.D.
1146	500 Ft. Spoo	21.8 mmf.			_
1148	100 Ft. Coil	21.8 mmf.	3,500	3.75	.175"
1149	50 Ft. Coil	,			
1135	500 Ft. Spoo	ol 21.8 mmf.	3,500	3.75	.190"



CONSTRUCTION No. 1146: Two conductors No. 22-7/30 stranded tinned copper, 1/32" "Hi-Tension" rubber, color coded, conductors twisted, cotton braid overall, saturated weather-proof finish.

CONSTRUCTION No. 1135: Two conductors No. 18-16/30 stranded tinned copper, 1/32" "Hi-Tension" rubber, color coded, conductors twisted, cotton braid overall, saturated weather-proof finish.

PHOSPHOR BRONZE DIAL CABLE



CONSTRUCTION: Made of 42 strands (6 x 7 x .004) genuine phosphor bronze wire with a linen center for extra flexibility. Is guaranteed not to warp or stretch.

No.	Put-up	Tensile Strength	O.D.
1689	25 Ft. Spool	50 lbs.	.036"
1691	100 Ft. Spool	50 lbs.	.036"
1692	500 Ft. Spool	50 lbs.	.036"

BRAIDED LINEN DIAL CABLE



CONSTRUCTION: Made of the finest linen obtainable. Composed of a very strong linen center over which is a smooth black braid.

No.	Put-up	Tensile Strength	o.D.
1694	25 Ft. Spool	40 lbs.	.057"
1695	100 Ft. Spool	40 lbs.	.057"
1696	500 Ft. Spool Longer Lengths A	40 lbs. vailable.	.057"

	LIGHT	Tensile	
No.	Put-up	Strength	O.D.
1697	25 Ft. Spool	22.5 lbs.	.036"
1698	100 Ft. Spool	22.5 lbs.	.036"
1699	500 Ft. Spool Longer Lengths A	22.5 lbs. vailable.	.036"
	FYTRA.THI	N	

21	50 Ibs.	.050	1		— Tensile	
			No.	Put-up	Strength	O.D.
			1700	25 Ft. Spool	18 lbs.	.027"
ALL P	RICES AND SPECI	FICATIONS SE	BJECT TO CHA	NGE WITHOUT NOTICE.		



FLEXIBLE VARNISHED TUBING AND SLEEVING

RADIO VARNISHED TUBING
— (Spaghetti). A sleeving with a heavy coat of varnish, in high gloss vivid calars. Average dielectric strength: 4,000 volts.

SATURATED SLEEVING — A fibre yarn sleeving saturated with high grade insulating varnish. Cuts clean and has a smooth interior wall. Average dielectric strength: 2,000 volts.

MAGNETO VARNISHED TUBING—The production of this type of tubing is under rigid control so as to insure a maximum in quality. It is thoroughly impregnated with a varnish of maximum insulating value. It is resistant to heat, oil, gas and acids. Colors are bright and vivid. Average dielectric strength: 7,000 volts.

No.	Approx.
20	.034"
19	.038"
18	.042"
17	.047"
16	.053″
15	.059"
14	.066"
13	.076"

	Approx.
No.	I.D.
12	.085"
11	.095"
10	.106"
9	.118"
8	.133"
7	.148"
6	.166"
- 5	.186"
4	.208″

.234
.263
.294"
.330
.375"
.438"
.500'
.625"

Tolerances: Sizes:
0 to 2—plus or minus .005"
3 to 13—plus or minus .004"
14 to 20—plus or minus .002"
Lengths—Standard 36"

Standard Colors: Black, Red, Yellow, Green and Brown Sizes follow the B & S System of gauging wires. For instance, a No. 10 tubing will fit over a No. 10 bare wire or any wire with an insulation of which the O.D. is equivalent to No. 10 B & S gauge. If in doubt, it is best to submit a sample of the wire or product to be covered.

Longer Lengths Available.

SPACHETTI TUBING



A superior varnished tubing for radio work. It will retain its dielectric and flexibility indefinitely. Takes up to No. 14

Colors: Black, Red, Yellow, Green and Brown

No. 2091 - 36" Lengths

UNBREAKABLE SOFT RUBBER PLUG



Made of sturdy live soft rubber. Brass blades. Unbreakable, easy to attach.

No. 1964 Per Carton

RADIO LIGHTNING ARRESTER



Made of high quality glazed porcelain with nickeled screws and nuts. For indoor or outdoor use.

No. 2001 Individually boxed

LEAD-IN STRIP-CLIP TYPE

GROUND CLAMP



Heavy gauge strap, Fahnestock terminal and brass screw and nut. This ground clamp makes a quick and positive connection. Fits a 3/8" to 2" pipe.

No. 2012 Type

Per Carton

Strap

9

ALPHA E

Strips are waterproofed being fully covered with a heavily lacquered braid. Fahnestock clips are riveted to strap for firm contact.

No.

Length

Per Carton

2002

12

50

NOTE: USEFUL INFORMATION FOR ORDERING

- All tests on specifications are approximate and subject to normal manufacturing tolerances.
- Lengths other than those regularly listed can be furnished.
- Other wires and cables made to specifications.
- Use the following symbols alongside catalog number for other than standard put-ups.

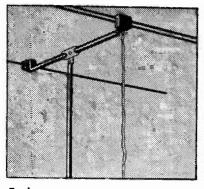
COILS	COILS	COILS	SPOOLS	SPOOLS	SPOOLS
25 FtH	100 FtK	500 FtB	25 FtN	100 FtQ	250 FtD
50 FtZ		1000 FtC	50 FtT	150 FtR	500 FtE
75 Ft	200 FtM	250 FtA	75 FtP	200 FtS	1000 FtF

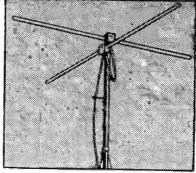
G - LONGER LENGTHS ON SPOOLS OR REELS

The constant development of new and improved designs and manufacturing processes results in continually changing specifications. In every case where Alpha wires shipped are different in specifications from those shown in this catalog, an improvement will be noted.

	1	1	l ou No. 134 Prince	l au lie i i i a a i i
Cat. No. List Price	Cat. No. List Price	Cat. No. List Price	Cat. No. List Price	Cat. No. List Price
301 \$ 1.20	1254 \$22.50	1490 \$22.50	1989 \$ 2.75	4 \$12.00
304 2.25	1255 25.00	1491 25.88		3 13.50 2 15.00
1114 9.38	1255/8 33.75	1492 31.75 1493 40.50	1995 4.75 1997 5.00	1 16.88
114E 5.13	1256 7.50	1494 52.13	1999 6.88	0 20.25
131 12.25	1257 10.00 1258 12.50	1495 91.88	2001 per C 40.00	3/8 24.38
135 20.50	1	1513 2.13	2002 per C 10.63	7/16 29.25
146 15.00	1261 55.00	1515 10.00	2012per C 10.00	1/2 33.75
148 3.13 149 1.63	1262 8.25	1523 2.70	2020per C 7.50 2031per C 7.50	5/8 39.38
	1263 11.50 1264 14.75	1525 12.75		SATURATED
150/3 32.50 150/4 45.00		1533 2.95 1535 14.00	2091	SLEEVING Per C ft
	1265 40.00	1535 14.00 1543 4.75	2106	Cat. No. List Pric
150 31.25 151 37.50	1266 50.00	1545 22.50	2109	
152 35.00	1267 23.13	1551 10.50	2112	24 \$ 5.33
157 105.00	1268 30.00	1552 1.18		19 4.2
160 21.25	1269 17.50	1553 13.13	101 2.38	18 4,50
161 35.00	1271 137.50	1554 1.45	104 1.80 105 1.23	17 4.63
163 37.50	1272 37.50	1555 17.88	106 23.00	16 4.88
164 50.00	l .	1557 25.25 1559 35.00	107 1.30	15 5.2
165 77.50	1274 15.00	1 -	110 1.00	14 5.5
166 117.50	1275 20.00	1561 8.13 156295	11167	13 5.7 12 6.1
168 25.00	1275/4 28.75 1275/5 42.50	1562	112 12.25	11 6.50
169 15.00	1275/6 50.00	1564 1.15	131	10 6.7
170 1.63		1565 14.00	135	9 7.13
.88	1276/2 75.00 1276/3 95.00	1567 19.13	136 8.75	8 7.50
182 4.00	1276 180.00	1569 26.88	161 1.68	7 7.8
183 5.00 184 6.50	1277 255.00	1571 18.38	164 1.28	5 8.3
185 8.25	1277/13 325.00	1573 20.75	165	5 8.6. 4 9.7
186 10.25	1277/15 375.00	1575 25.63 1577 34.13	166 16.00	3 11.2
187 11.75	1277/25 575.00	1577 34.13 1579 46.50	269 1.75	2 12.00
188 13.50	1279 18.75	1581 13.75	274 16.75	1 13.5
189 15.25 190 17.50	1280 28.13	1583 16.50	275 2.60	0 16.8
190 17.50 192 21.25	1281	1585 21.00	280 25.25 281 3.75	3/8 21.7
193 15.00	1282	1587 27.25	283 36.75	7/16 26.2 1/2 30.0
	1283 4.13	1589 35.75	284 1.70	5/8 35.6
194/22 37.50 194 40.00	1284 8.00	1623 13.13	286 16.25	MAGNETO
196 50.00	1289 350.00	1625 125.00	287 2.50	VARNISHED
197 62.50	1291 500.00 1293 662.50	1633 2.50	289 24.25	TUBING
198 75.00	1295 937.50	1635 11.25	290 3.70	PerC ft
200 36.25		1636 13.75 1637 6.25	292 36.25	Cat. No. List Pric
201 40.00	1460 14.38 1460-Q 1.58	1637 6.25 1638 30.00	295 12.38	24 \$ 6.0
202 55.00	1460-Q 1.58 1461 16.63	1	296 10.75 297 6.75	20 6.0
229 2.50	1461-Q 1.80	1689 1.13 1691 3.75	297 6.75 298 4.50	19 6.0
230 2.75	1462 21.00	1692 16.25		18 6.0 17 6.0
231 3.25 232 5.50	1462-Q 2.23	1694 1.13	RADIO VARNISHED	17 6.0
232 5.50 233 8.25	1463 25.88	1695 3.88	TUBING	15 6.7
234 12.00	1463-Q 2.73 1464 34.75	1696 18.00	Per C ft.	14 7.1
235 14.50	1464 34.75 1464-Q 3.60	1697 1.00	Cat. No. List Price	13 7.2
241 10.00		1698 3.50	24 \$ 6.00	12 7.5
	1465 13.25 1465-Q 1.45	1699 16.88 170068	20 4.63	11 8.6
242 37.50	1466 14.25		19 5.00 18 5.38	9 10.1
244 8.75	1466-Q 1.55	1951 16.88 1952 18.13	18 5.38 17 5.63	8 10.7
245 10.50	1467 18.00	1952 18.13 1953 21.88	16 5.75	7 11.7
246 12.00	1467-Q 1.93	1954 28.75	15 6.00	6 12.8
247 15.00 247/6 20.00	1468 21.63	1955 32.50	14 6.13	5 14.0
247/6 20.00 247/8 27.50	1468-Q 2.30 1469 27.88	1956 57.50	13 6.50	4 15.1
	1469 27.88 1469-Q 2.93	1957 82.50	12 7.13	3 16.2
248 7.50		1958 112.50	11 7.50	17.0
	1480 21.63	1964	1	1 18.3 0 22.5
1249 10.00				1 200
1250 11.25	1481 25.25	1966 3.63	1 8 8,63	1 3/8 28.1
1250 11.25 1250/18 16.25	1482 30.50	1966 3.63 1967 8.25	0	7/16 31.8
1250 11.25				3/8

BELDEN • FM antenna systems





- Highly efficient
- Broad response
- Low standing wave ratio
- Perfect matching
- Mechanically strong
- Light in weight
- Factory assembled
- Weather resistant
- Wind resistant

Trade Number	†Pkg.	Description	Net Weight in Lb	Contents		
8320	ìκ	FM DIPOLE ANTENNA The Belden FM Dipole Antenna System is scientifically engineered and may be used on all FM radios. It can be used for Standard Broadcast as well as FM reception. Its performance has been proven in laboratory and field service tests. Careful electrical design has resulted in excellent response over the entire FM band. Maximum signal and trouble-free reception are assured.	2.5	1—65′ 300-OHM Transmission Line 82 1—Aluminum Antenna Element 1—Porcelain Junction Block 1—5′ Aluminum Standard 2—Stand-off Insulators 8126 2—Mounting Straps 1—Instruction Sheet		
8321	ıĸ	FM REFLECTOR For greater radio signal strength, use the Belden FM Reflector with the No. 8320 Belden FM Dipole Antenna to form an antenna-reflector array. The addition of a reflector improves FM reception for any installation and is necessary in locations where the radio signal is weak, for example, due to its distance from radio stations or its location among buildings. Also, a reduction in interference may be effected to the rear or reflector side of the antenna.	.8	1—Aluminum Reflector Element 1—Porcelain Junction Block 1—Aluminum Cross Member 1—Instruction Sheet		
Trade		arresters - arou	nd cla	1 100 m c		

8321	1K	FM reception for any install where the radio signal is wee from radio stations or its loca tion in interference may be of the antenna.
Trade Number	†Pkg.	DESCRIPTION
8304	1 K	1—75′ 7x22 Beldenamel Antenna Wire 8005 1—35′ 16 Stranded Lead-in Wire 8201 1—Arrester 8896 1—Type "C" Ground Clamp 8897 1—12″ Lead-in Strip 8890 2—Antenna Insulators 8103 2—Porcelain Nail-on-knobs 8102 1—Stand-off Insulator 8104 1—Instruction Sheet
8305	1 K	1—75' 7x22 Bare Copper Antenna Wire 8000 1—35' 16 Stranded Lead-in Wire 8201 1—Arrester 8896 1—Type "C" Ground Clamp 8897 1—12" Lead-in Strip 8890 2—Antenna Insulators 8103 2—Porcelain Nail-on-knobs 8102 1—Stand-off Insulator 8104 1—Instruction Sheet
8309	1 K	1—50' 7x24 Bare Copper Antenna Wire 8002 1—25' 18 Stranded Lead-in Wire 8200 —Arrester 8896 1—Type "C" Ground Clamp 8897 2—Antenna Insulators 8103 1—Porcelain Nail-on-knob 8102 1—Stand-off Insulator 8104 1—Instruction Sheet
8817	100′ S	litz wire For rewinding antenna primaries and for hand-wound r-f coils. 5x44 Celenamel with wrap of nylon.

arresters • ground clamps • lead-in strips • insulators

	Trade Numb	er	DESCRIPTION
	8895	1 K	Belden doublet-type bakelite ar- rester. Listed as approved by Underwriters
Bellen B	8896	1 K	Belden single-type bakelite ar- rester. Listed as approved by Underwriters
1	8892	25 K	Ground clamp—8½" long
	8897	25 K	"C" type ground clamp. Fits pipe up to 13%" OD
S summe	8104	10 K	7" Stand-off insulator
	8890	1 K	12" Single lead-in strip—rubber insulated—clips both ends
	8126	10 K	3" Stand-off insulator for flat transmission line
The Summin	8102	10 K	Porcelain nail-on-knobs
	8103	10 K	Porcelain insulators, 2½" over-all length

BELDEN • aerial wire • lead-in wire

shielded lead-in wire

	Number	Length and †Package	Size	DESCRIPTION	Stranding	Insulation Thickness (inches)	Finished O D (inches)
	8206	250′ S	18	Tinned copper, flexible strand- ing; rubber insulation; tinned copper braid shield	7x27	.040″	.155
lead-in wire				•			
	8200	100' \$ 500' \$ 1000' \$.18	Tinned copper, flexible stranding; rubber insulation	7x27	.040	.126
	8201	50' CK 100' S 250' S 500' S 1000' S	16	Tinned copper, flexible stranding; rubber insulation	7x25	.040	.135

voice coil lead wire



8127

10'***

25

5 Bare copper wire braided

32x40

.024

***Packaged 10 ft on card, 5 cards in carton.

indoor aerial wire-EXTRA FLEXIBLE



8014

500' SK

25

Tinned copper, flexible stranding; chrome vinyl plastic insulation

13x36

.010

.044

*Packaged 25 ft on card, 5 cards in carton.

aerial wire (FULL GAUGE)

STRANDED BARE COPPER		STRANDED BELDENAMEL			SOLID 1	SOLID TINNED COPPER (Bus Bar Wire)			SOLID BELDENAMEL			
Trade Number	Length and †Package	Size	Trade Number	Length and †Package	Size	Trade Number	Length and 1Package	Size	Trade Number	Length and †Package	Size	
8000	50' C 75' C 100' C 1000' S	7x22	8005	75' CK 100' CK 1000' S	7x22	8011	100' CK	12	8008	100' CK 200' S 500' S	12	
	1000 3					8012	100' CK	14				
8002	50' C 75' C 100' C 1000' S	7x24	8006	100' CK 1000' S	7x20	8013	100' CK	16	8009	100' CK 500' S	14	

					1	terr	ninals				DIMEN	SIDNS—I	NCHES
	_		_				sy to solder				A	8	С
B A	, —) <u>E</u>	C. LANE ALL	SIONS—I	woute.		Trade Number	Quantity and +Package	For Screw Size	Hole Size or Space Opening		Over-all Length
				A	B	C		8996	*25c pkg. 100 K	10	.191	5/16	%
	Trade Number	Quantity and †Package	For Screw Size	Hole Size or Space Opening	Over-all Width	Over-sit Length			1000 K				
	8989	*25c pkg. 100 K 1000 K	12	.219	3/6	13,16		8997	*25c pkg. 100 K 1000 K	8	.165	11/4	11/46
	8992	*25c pkg. 100 K 1000 K	8	.165	11/2	25,42		8998	*25c pkg. 100 K 1000 K	8	.172	14	1/2
	8993	*25c pkg. 100 K 1000 K	10	.191	3, ís	%íe		8999	*25c pkg. 100 K 1000 K	8	.172	5 ∕16	%
	8995	*25c pkg. 100 K 1000 K	8	.165	5, í6	9∕i6		8994	100 K nal	ls, inclu	rted Be iding 20 -8998, 35	-8995,2	

*25c package — Sealed Cellophane Envelopes 20 Envelopes in carton
†CK—Coiled in carton K—Carton CR—Crate Reel S—Spool C—Coil SK—Spooled in carton

BELDEN • auto and aircraft radio wires and shielding

Belden supplies a complete line of auto radio wires and shielding to handle every wire requirement in installation and servicing. In installations of this type, the use of the correct wire is particularly important. Applications are indicated in the listings below.

: ILLUSTRATION AND COLOR	Trade Number	Lengths and †Package	A.W.G	. GENERAL CONSTRUCTION	Stranding	Finished Cable OD (inches)	Nominal Capacitance Per Ft (mmf)
Belden Black	8664	100′ S	28	.013" Tinned steel wire, solid; cellulose yarn braid; poly- ethylene insulation; tinned cop- per braid shield; black vinyl plastic jacket		.250	14.5
Belden Black	8667	100′ S	16	Tinned copper, flexible stranding; rubber insulation; cotton braid; lacquer coating	19x29	.280	
Belden:	8665	100′ S	19	Stainless steel alloy, flexible stranding; rubber insulation; glass yarn web braid; neoprene jacket; tinned copper braid shield; neoprene jacket	6x.013"+ 1x.011" steel alloy	.365	
Black, Blue, Green, Red, Yellow, White	8833	100' S 1000' S	18	Tinned copper, flexible stranding; paper wrap; rubber insulation; cellulose acetate yarn braid; lacquer coating		.136	
Black With One White Tracer	8652	100′ s	16	Tinned copper, flexible strand- ing; cellophane wrap; rubber insulation; black cotton braid with one white tracer; lacquer coating	19x29	.140	
Green With Two White Tracers	8651	100′ S	14	Same as 8652 except green cotton braid with two white tracers	19x27	.165	
Red With Three White Tracers	8650	100′ S	12	Same as 8652 except red cotton braid with three white tracers	19x25	.195	
	8656	100′ S	16	Tinned copper, flexible strand- ing; cellophane wrap; rubber in-	19x29	.170	
	8655	100,′ S	14	sulation; cotton braid; blue lac- quer coating; tinned copper braid shield	19x27	.195	
	8654	100′ S	12		19x25	.225	
	8660	50' S K 250' S		Tinned copper braid in form of tubing	96x34	13/64 I D	
1444444444444	8668	50' S K 250' S			120x34	1/810	
	8661	50' S K 250' S			192x34	3/8 I D	
	8669	50′ S 250′ S			336x34	1/210	
	8662	50′ S 250′ S			576x34	ם ו 25/32	
નામાં મામ કર્યા છે. મામ મામ કર્યા હતા કર્યા હતા કર્યા હતા કર્યા હતા હતા હતા હતા હતા હતા હતા હતા હતા હત	8657	50' CK		Tinned copper braid shield over fabric loom		3/16 I D	
	8658	50' CK				5/16 D	
†CK—Coiled in carton K—Carton CR-	Crate reel	S—Sr	oool	C-Coil SK-Spooled in car	ton		

BELDEN • microphone cables

Performance and appearance are the outstanding features built into Belden microphone cables. Polyethy ene insulation is used for outstanding dielectric properties and vinyl plastic jackets for protection.

Dielectrically, Belden microphone cables have low capacitance, high insulation resistance, and low attenuation at audio frequencies. In addition, they provide resistance to physical abuse, aging, and moisture.

plastic microphone cable

ILLUSTRATION AND APPLICATION	Trade Number	L ^e ngths †Package and Color	A. W.G. and No. Con- dr s.	GENERAL CONSTRUCTION	Stranding	Fin- Ished Cable O D (Inches)	Nom. Capaci- tance Per Ft (mmf)
Brulfeten (2000)	8411	25' CK 100' S Chrome	25-1	Tinned copper and tinned steel, flexible stranding; cellulose yarn braid; polyethylene insulation; tinned copper braid shield; chrome vinyl plastic jacket	3x33 copper plus 4x33 steel	.140	40.
For crystal, ribbon and carbon microphones	8401	25' CK 50' CK 100' S 500' S Chrome	25-1	Tinned copper and tinned steel, flexible stranding; cellulose yarn braid; polyethylene insulation; tinned copper braid shield; chrome vinyl plastic jacket	3x33 copper plus 4x33 steel	.200	25.
For carbon inicrophones	8422	25' CK 2: 50' CK 100' S 500' S Chrome		Tinned copper, flexible strand- ing; polyethylene insulation, color coded; conductors cabled with fillers; rayon braid; tinned copper braid shield; chrome vinyl plastic jacket	16x34	.235	**28.
rubber microphone cal	ole						
Belden Belden For crystal ribbon and carbon microphones	8410	25' CK 50' CK 100' S 500' S Black	25-1	Tinned copper and tinned steel, flexible stranding; cellulose yarn braid; waxed; rubber insula- tion; rayon braid; tinned copper braid shield; rayon wrap; black rubber jacket	3x33 copper- plus 4x33 steel	.245	33.
Belden For carbon microphones	8412	25' CK 50' CK 100' S 500' S Black	20-2	Tinned copper, flexible strand- ing; cotton wrap; rubber insu- lation, color coded; conductors cabled with fillers; rayon braid; tinned copper braid shield; cot- ton wrap; black rubber jacket	26x34	.280	***63.
Belden Bergenbones	8423	50' CK 250' S Black	20-3	Tinned copper, flexible stranding; cotton wrap; rubber insulation, color coded; conductors cabled; rayon braid; tinned copper braid shield; cotton wrap; black rubber jacket	26x34	.280	††54.

^{**}Between one conductor and other conductor connected to shield.

Nominal capacitance between conductors only, 16 mmf per foot.

shielded multiple conductor cables

For carbon microphones

Belden multiple conductor cables are developed for long service life, excellent mechanical and electrical characteristics, and unnorm quality. These cables are used for a multitude of applications including power and interconnecting cords on radio receivers, electronic devices, speakers, analyzer test equipment, remote control circuits, and press-to-talk microphone circuits.

ILLUSTRATION	Trade Number	Lengths †Package and Color	A.W.G. and No. Con- drs.	GENERAL CONSTRUCTION	Stranding	Nom, Insula- tion Thick. (inches)	Nom. Jacket Thick. (inches)	Fin- Ished Cable O D (inches)
	*8424	50' CK 250' S Black	20-4	Tinned copper, flexible strand- ing; cotton wrap; rubber insu- lation, color coded; conductors cabled; rayon braid; tinned copper braid shield; cotton wrap; black rubber jacket	26x34	.020	.040	.305
	8425	50' CK 250' S Black	20-5	Same as 8424 except five conductors	26x34	.020	.040	.335
· Belden	8426	100' S Black	20-6	Same as 8424 except six conductors	26x34	.020	.040	.355
	8427	100' S Black	20-7	Same as 8424 except seven conductors	26x34	.020	.040	.370

*Also used as microphone cable.

†CK—Coiled in carton K—Carton CR—Crate reel S—Spool · C—Coil SK—Spooled in carton

Nominal capacitance between conductors only, 16 mm; per foot. **Between one conductor and other conductor connected to shield. Nominal capacitance between conductors only, 36 mm; per foot.

Nominal capacitance between conductors only, 36 mmf per foot.

††Between one conductor and other conductors connected to shield.

Nominal capacitance between conductors only, 41 mmf per foot.

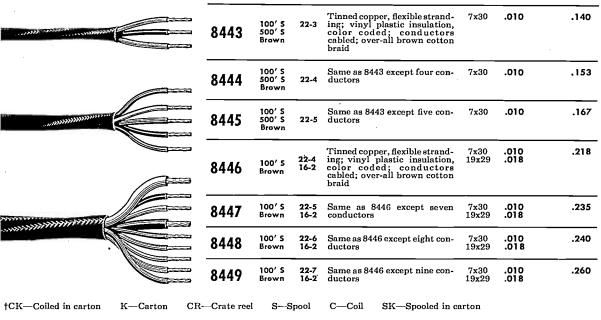
BELDEN • multiple conductor cables

RUBBER-JACKETED PORTABLE CORD

ILLUSTRATION	Trade Number	Lengths †Package and Color	A.W.G. and No. Con- drs.	GENERAL CONSTRUCTION	Stranding	Insula- tion Thick, (inches)	Jacket Thick. (inches)	Fin- ished Cable O. D. (inches)
Underwriters' Approved Type SV	8452	100' S 500' S Black	18-2	Bare copper, flexible strand- ing; cotton wrap; rubber insu- lation, color coded; conductors cabled with fillers; cotton wrap; black rubber jacket	41x34	1/64	1/ 32	.245
many II	8453	100' S 500' S Block	18-3	Bare copper, flexible stranding; cotton wrap; rubber insulation, color coded; conductors cabled with fillers; cotton wrap; black rubber jacket	41x34	1/64	1/32	.275
	8454	100' S 500' S Black	18-4	Same as 8453 except four conductors	41x34	1/64	1/32	.265
Belden	8455	100' S 250' S Black	20-3 18-2	Bare copper, flexible strand- ing; cotton wrap; rubber insu- lation; color coded; conductors cabled with fillers; cotton wrap; black rubber jacket	26x34 41x34	1/64	1/32	.285
Underwriters' Approved Type POSJ-64	8462	100' S 250' S Brown	18-2	Bare copper, flexible stranding; cotton wrap, color coded; parallel conductors with rubber insulation and jacket integral	41x34	1/32		.123x .223
Underwriters' Approved Type POT-64	8888	250′ S Black	18-2	One bare and one tinned cop- per conductor, flexible strand- ing; parallel conductors with vinyl plastic insulation and jacket integral	41x34	1/32		.114x .231

Flexible, light weight and small diameter. Applications include control, annunciator, and communications circuits.

BRAIDED PLASTIC-INSULATED CABLE (See intercommunications cables, page 12, for shielded types.)



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ELDEN	o tr	ansi	mis	sion line cab	les				AL ELECT	_	ROPERTIE	s
ILLUSTRATION AND TYPE	Trade Number	Lengths and †Package	A.W.G.	GENERAL CONSTRUCTION	Stranding	Fin- ished Cable O.D. (inches)	Fre- quency (mc)	Attenua- tion Per 100 Ft (deci- bels)	Imped- ance (ohms)	Velocity of Propa- gation (per cent)	Capaci- tance Per Ft (mmf)	Punctur- ing Voltage (volts)
Coaxial	8216	50′ S 250′ S	14	Tinned copper, flexible strand- ing, low-loss rubber insulation; tinned copper braid shield; rubber jacket	19x27	.460	5.0 5.0 10. 50. 100.	.30 .51 1.8 2.9 10.0 17.0	72.	56.	37.	30000
Twisted Pair	8204	500′ \$	18	Tinned copper, flexible stranding; cotton wrap; low-loss rubber insulation, color coded; two conductors cabled; white cotton braid treated with weather-resistant compound	7x26	.190	1.0 5.0 10. 50. 100.	$\begin{array}{c} .37 \\ .53 \\ 1.4 \\ 2.3 \\ 7.4 \\ 12.3 \end{array}$	72.	61.	21.	
Twisted Pair (Shielded)	8209	500' S	18	Tinned copper, flexible stranding; cotton wrap; low-loss rubber insulation, color coded; two conductors cabled; paper wrap; tinned copper braid shield; white cotton braid, treated with weather-resistant compound		.235	.5 1.0 5.0 10. 50. 100,	.91 1.1 2.1 3.2 9.5 14.9	72.	57.	32.*	
Twisted Pair	8205	500′ S	22	Tinned copper, flexible strand- ing; paper wrap; rubber insu- lation, color coded; two con- ductors cabled; black cotton braid, treated with weather- resistant compound	7x30	.175				5335		
eldon Parallel	8222	100′ \$ 500′ \$	20	One bare and one tinned cop- per conductor, flexible strand- ing; conductors parallel; poly- ethylene plastic insulation	7x28	.075 x.128	50. 100. 200. 300. 400. 500.	5.3 7.7 11.0 13.6 15.9 17.8	72.	69.	20.7	- 257
elden Parallel	8223	100′ S 500′ S	20	Same as 8222	7x28	.075 x.143	50. 100. 200. 300. 400. 500.	3.5 5.1 7.2 8.9 10.3 11.5	100.	72.	16.3	
elden Parallel	8224	100′ S 500′ S	20	Same as 8222	7 x 28	.075 x.182	50. 100. 200. 300. 400. 500.	1.9 2.8 4.2 5.4 6.4 7.3	150.	76.	9.8	2
Belden	8225	100' S 500' S 1000' S	20	Same as 8222	7x28	.075 x.390	50. 100. 200. 300. 400. 500.	.72 1.1 1.7 2.2 2.7 3.1	300.	85.	4.6	
Belden	8235	100′ \$ 500′ \$	18	Bare copper, flexible strand- ing; conductors parallel; polye- thylene plastic insulation	7x26	.200 x.530	50. 100. 200. 300. 400. 500.	.70 1.10 1.73 2.28 2.74 3.18	300.	82.	5.8	35000
Parallel Parallel	8210	100′ S 500′ S	13	Bare copper, flexible strand- ing; conductors parallel; poly- ethylene plastic insulation		.166 x.278	50. 100. 200. 300. 400. 500.	2.2 3.1 4.4 5.5 6.3 7.0	72.	85.	22.	15000
elden Parallel (Shielded)	8226	100′ S 500′ S	20	One bare and one tinned cop- per conductor, flexible strand- ing; conductors parallel; poly- ethylene plastic insulation; tinned copper braid shield; black vinyl plastic jacket		.190 x.310	200.	5.8 8.3 12.0 14.8 17.2 19.4	100.	64.	18.2*	
Twisted Pair (Shielded)	8227	100′ S 250′ S	20	One bare and one tinned cop- per conductor; flexible strand- ing; polyethylene plastic insu- lation; two conductors cabled; polyethylene plastic jacket; tinned copper braid shield; black vinyl plastic jacket		.335	50. 100. 200. 300. 400. 500.	2.6 4.1 6.4 8.4 10.2 11.8	100.	62.	22.*	٠
Coaxial	8229	100′ S 500′ S	22	Bare copper, solid; polyethy- lene plastic insulation; tinned copper braid shield; black vinyl plastic jacket		.242	50. 100. 200. 300. 400. 500.	3.2 5.0 7.7 10.0 12.1 14.1	72.	67.	20.5	20000
Coaxial	8228	100' S 500' S	20	Bare copper, solid; polyethy- lene plastic insulation; tinned copper braid shield; black vinyl plastic jacket		.195	50. 100. 200. 300. 400. 500.	2.75 4.45 7.2 9.6 11.8 13.6		66.	28.5	20000

S-Spool

CR-Crate reel

C-Coil

SK-Spooled in carton

*Capacitance between conductors.
†CK—Coiled in carton K—Carton

Belden transmission cables are available for every receiving and low power transmitting antenna application. Coaxial, twisted pair, and parallel type lines are represented.

These cables are designed to meet exacting electrical requirements and are mechanically strong, weather re-

sistant, and give long service life. Cables constructed with polyethylene insulation are especially suitable for very high frequency (VHF) and ultra high (UHF) ranges where the losses in ordinary types of transmission line cables are excessive.

TRANSMISSION LINE CABLE APPLICATIONS	Lengths and †Packag	A. W. G.	Trade Number	ILLUSTRATION AND TYPE
72-Ohm cable for use with receiving and low power transmitting antenna at low frequencies. Also for heavy-duty high-voltage leads.	50' S 250' S		8216	
72-Ohm cable for use with doublet receiving antenna at low frequencies.	500′ S	18	8204	- Coaxial Twisted Pair
72-Ohm shielded cable for use with doublet receiving antenna at low frequencies to reduce noise pick-up. Also used for long runs in extension speaker installations.	500′ S	18	8209	Twisted Pair (Shielded)
Inexpensive cable for use with doublet receiving antenna at low frequencies. Also used for extension speaker and control circuits.	500' S	22	8205	Twisted Pair
72-Ohm cable for use with receiving antenna at high frequencies.	100' S 500' S	20	8222	Beiden Parallel
100-Ohm cable for use with receiving antenna, matching transformer, connecting link between electronic units, and experimental applications at high frequencies.	100' S 500' S	20	8223	Belden Parallel
150-Ohm cable for use with receiving antenna, matching transformer and experimental applications at high frequencies.	100' S 500' S	20	8224	Belden Parallel
300-Ohm cable especially recommended for use with television and FM receiving antenna. Exceptionally low losses at high frequencies.	100' S 500' S 1000' S	20	8225	Belden
300-Ohm heavy-duty cable especially recommended for use with television and FM receiving antenna. Also for low power transmitting antenna. Exceptionally low losses at high frequencies.	100′ S 500′ S	18	8235	Parallel Belden
72-Ohm cable for use with low power transmitting antenna at high frequencies.	100' S 500' S	13	8210	Parallel Belden
100-Ohm shielded cable for use with television and FM antenna to reduce noise pick-up.	100' S 500' S	20	8226	Parallel Parallel
100-Ohm shielded cable for use with television and FM antenna in extremely noisy locations.	100' S 250' S	20	8227	(Shielded) Twisted Pair
72-Ohm cable for use with television antenna.	100' \$ 500' \$	22	8229	(Shielded) Coaxial
52-Ohm cable for radio frequency transmission, video, test equipment, and pulse transmission.	100' S 500' S	20	8228 i	Coaxial

BELDEN • hookup and lead wires

There is a Belden hook-up and lead wire construction for every service requirement—for receivers, transmitters,

amplifiers, rectifiers, aircraft radio, geophysical instru-

OOKUP WIRE	Trade Number	Lengths and †Package	A,W.G.	GENERAL CONSTRUCTION AND COLORS	Stranding	Insula- tion Thick. (inches)	Fin- ished OD (inches)	Nominal *D-C Ins. Res. Per Ft (meg- ohms)	Nominal **Break- down Voltage (voits)
Black, Blue, Green, Red, Yellow,	8941	25' CK 100' S K 1000' S	20	Tinned copper, solid; heavy cellulose acetate yarn wrap; cellulose	solid		.072	200	1000
White, Brown, Orange Black, Blue, Green, Red, Yellow, White	8945	25' CK 100' S K 1000' S	18	acetate yarn braid; - fungus-resistant lac- quer coating	solid		.080	200	1000
	8943	25' CK 100' SK 1000' S	20	Tinned copper, flexible stranding; heavy cellu- lose acetate yarn wrap;	10x30		.077	200	1000
Black, Blue, Green, Red, Yellow, White, Brown, Orange Black, Blue, Green, Red, Yellow, White	8947	25' CK 100' S K 1000' S	18	cellulose acetate yarn - braid; fungus-resist- ant lacquer coating	16x30		.087	200	1000
WWW.	8942	25' CK 100' SK 1000' S	16	·	26x30		.099	200	1000
Black, Blue, Green, Red, Yellow, White	8938	25' CK 100' S K 500' S	14	(2 colors only; Red or Black)	41x30		.115	200	1000
RADIO-ELECTRONIC WIRES AND CAMES	8864	lacquei	ed. On	DISPLAY ASSO Rolls 8941. Size 20 solid e each Black, Blue, Green, Rolls 8943. Size 20 flexib	; cellulose Red, Yellov	e acetate v, and W	hite.	-	
3865	8865	lacque	red. On	e each Black, Blue, Green,	Red, Yellov	v, and W	hite.	and bra	aru
WIRE ASSORTMENT		trois, in	audio	ook-up wire and as leads and power circuits. Furni- d, Yellow, and White. SPI	shed in the	e tollowi	speaker ng 6 co	s, and co lors: Bla	on- ck,
RUBBER-INSULATED PUSH-BACK Colors:		25′ C K		Tinned copper, solid; cotton wrap; unvul-					
Black, Blue, Green, Red, Yellow, White	8837	100' S K 1000' S	20	canized rubber insula- tion; cellulose acetate yarn braid; fungus-re- sistant lacquer coating	solid	.010	.075	2000	200
Slack, Blue, Green, Red, Yellow, White	8837	100' S K	20	canized rubber insula- tion; cellulose acetate yarn braid; fungus-re-	solid	.010	.075	2000	
llack, Blue, Green, Red, Yellow, White		100′ 5 K 1000′ S	2= 11	canized rubber insula- tion; cellulose acetate yarn braid; fungus-re- sistant lacquer coating "SAME AS 8837 EX- CEPT FLEXIBLE STRANDING" Tinned copper, flexible stranding; paper wrap,	Tip es				200
Slack, Blue, Green, Red, Yellow, White	8838	100' S K 1000' S 25' C K 100' S K 1000' S	20	canized rubber insula- tion; collulose acetate yarn braid; fungus-re- sistant lacquer coating "SAME AS 8837 EX- CEPT FLEXIBLE STRANDING" Tinned copper, flexible	10×30	.010	.081	2000	200
	8838	100' \$ K 1000' \$ 25' C K 100' \$ K 1000' \$ 1000' \$	20 20 18	canized rubber insula- tion; cellulose acetate yarn braid; fungus-re- sistant lacquer coating "SAME AS 8837 EX- CEPT FLEXIBLE STRANDING" Tinned copper, flexible stranding; paper wrap, rubber insulation; cel- lulose acetate yarn braid; fungus-resistant lacquer coating uits where shielded grid re- rom stray fields.	10x30 10x30 16x30	.010 .031 .031 quired ar	.081 .127 .136	2000 10000 10000	200 800 800
SHIELDED HOOKUP WIRE	8838	100' \$ K 1000' \$ 25' C K 100' \$ K 1000' \$ 1000' \$	20 20 18 in circuctor fr	canized rubber insula- tion; cellulose acetate yarn braid; fungus-re- sistant lacquer coating "SAME AS 8837 EX- CEPT FLEXIBLE STRANDING" Tinned copper, flexible stranding; paper wrap, rubber insulation; cel- lulose acetate yarn braid; fungus-resistant lacquer coating uits where shielded grid re	10x30 10x30 16x30 eturn is rec 10x30	.010 .031 .031 quired ar	.081 .127 .136	2000 10000 10000	200 800 800
SHIELDED HOOKUP WIRE	8838 8834 8833	100' S K 1000' S 1000' S 1000' S 1000' S 1000' S 1000' S Used condi	20 20 18 in circuit of frequency from r-f	canized rubber insula- tion; cellulose acetate yarn braid; fungus-re- sistant lacquer coating "SAME AS 8837 EX- CEPT FLEXIBLE STRANDING" Tinned copper, flexible stranding; paper wrap, rubber insulation; cel- lulose acetate yarn braid; fungus-resistant lacquer coating uits where shielded grid re- rom stray fields. Tinned copper, flexible stranding; rubber insu- lation; cellulose ace- tate yarn braid; fun- gus-resistant lacquer coating; tinned copper	10x30 10x30 16x30 10x30 properties d, each wi	.010 .031 .031 quired ar	.081 .127 .136 ad to shi .117	2000 10000 10000 ield a cir 5000	800 800 400
SHIELDED HOOKUP WIRE	8838 8834 8833	100' S K 1000' S 1000' S 1000' S 1000' S 1000' S 1000' S Used condi	20 20 18 in circuit of frequency from r-f	canized rubber insulation; cellulose acetate yarn braid; fungus-resistant lacquer coating "SAME AS 8837 EXCEPT FLEXIBLE STRANDING" Tinned copper, flexible stranding; paper wrap, rubber insulation; cellulose acetate yarn braid; fungus-resistant lacquer coating uits where shielded grid recommended in the stranding; rubber insulation; cellulose acetate yarn braid; fungus-resistant lacquer coating; tinned copper, flexible stranding; rubber insulation; cellulose acetate yarn braid; fungus-resistant lacquer coating; tinned copper braid shield Teircuits where low-loss alors: Block, Blue, Green, Reach with Black Tracer. S	10x30 10x30 16x30 eturn is rec 10x30 properties d, each wi PECIFY (.010 .031 .031 quired ar	.081 .127 .136 ad to shi .117	2000 10000 10000 ield a cir 5000	800 800 800 400 d in
SHIELDED HOOKUP WIRE	8838 8834 8833 8885	100' S K 1000' S 1000' S 1000' S 1000' S 1000' S 1000' S Used condi 25' C K 100' S K 500' S	20 18 in circuctor fr 20 on r-f wing co	canized rubber insulation; cellulose acetate yarn braid; fungus-resistant lacquer coating "SAME AS 8837 EX-CEPT FLEXIBLE STRANDING" Tinned copper, flexible stranding; paper wrap, rubber insulation; cellulose acetate yarn braid; fungus-resistant lacquer coating uits where shielded grid reform stray fields. Tinned copper, flexible stranding; rubber insulation; cellulose acetate yarn braid; fungus-resistant lacquer coating; tinned copper braid shield Circuits where low-loss olors: Block, Blue, Green, Reach with Black Tracer. S. Tinned copper, solid; two cellulose acetate yarn braids, waxed yarn braids, waxed Colors:	10x30 10x30 16x30 eturn is rec 10x30 properties d, each wi PECIFY (.010 .031 .031 quired ar	.127 .136 and to sh .117	2000 10000 10000 ield a cir 5000	800 800 cuit 400 d in llow
SHIELDED HOOKUP WIRE R-F PUSH-BACK WIRE CELLULOSE ACETATE BRAID WAXED	8838 8834 8833 8885	100' S K 1000' S 25' C K 1000' S K 1000' S 1000' S 1000' S 1000' S Used condi 25' C K 100' S K 100' S K 100' S K	20 18 in circulator fr 20 on r-fwing cc White, e 22	canized rubber insulation; cellulose acetate yarn braid; fungus-resistant lacquer coating "SAME AS 8837 EXCEPT FLEXIBLE STRANDING" Tinned copper, flexible stranding; paper wrap, rubber insulation; cellulose acetate yarn braid; fungus-resistant lacquer coating uits where shielded grid recom stray fields. Tinned copper, flexible stranding; rubber insulation; cellulose acetate yarn braid; fungus-resistant lacquer coating; tinned copper braid shield circuits where low-loss olors; Block, Blue, Green, Reach with Black Tracer. S Tinned copper, solid; two cellulose acetate yarn braids, waxed	10x30 10x30 16x30 eturn is rec 10x30 properties d, each with	.010 .031 .031 quired ar	.081 .127 .136 ad to sh117 .117 .116 .117	2000 10000 10000 ield a cir 5000 Furnisher, and Ye 1000	400

^{*}Measurements for d-c insulation resistance were made by means of a megohm bridge at 300 volts on specimens in mercury after subjection to 90% relative humidity and 100 F for 24 hours.

**Measurements for insulation breakdown were made on specimens in mercury by application of gradually increasing 60-cycle a-c potential.

BELDEN • hook-up and lead wires

R-F PUSH-BACK WIRE CELLULOSE ACETATE BRAID WAXED



Trade Number	Lengths and †Package	A.W.G.	GENERAL CONSTRUCTION AND COLORS	Stranding	Insula- tion Thick, (inches)	Fin- Ished O D (inches)	Nominal *D-C Ins, Res, per Ft (meg- ohms)	Nominal **Break- down Voltage (volts)
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DISPLAY ASSORTMENT

0000	Contents: 2 Rolls 8941. Size 20 solid; cellulose acetate wrap and braid lacquered, Black and Red; 2 rolls 8943. Size 20 flexible; cellulose acetate wrap and braid lacquered, Blue and Green; 2 rolls 8913. Size 20 flexible; vinyl plastic, Yellow and White.

8810	25' CK 100' S K 1000' S	22	Tinned copper, flexible stranding; two cellu-	7×30	.065	1000	1000
8839	25' CK 100' S K 1000' S	20	lose acetate yarn braids, waxed Colors:	10x30	.072	1000	1000
8844	25' CK 100' \$ K 1000' \$	18	Black—White Tracer Blue—White Tracer Green—White Tracer Red—White Tracer	16x30	.092	1000	1000
8862	25' CK 100' S K 1000' S	16	Yellow—Black Tracer White—Black Tracer	26×30	.095	1000	1000



PLASTIC INSULATED

General-use hook-up wire and as leads for radio components such as transformers, chokes, and controls. Furnished in the eight following colors: Block, Blue, Green, Red, Yellow, White, Brown, and Orange. SPECIFY COLOR.

Wires with \(\lambda_{\text{"}}^{\text{"}} \) plastic insulation are designed for use within the chassis of radio receivers, amplifiers, instruments, controls, and other electronic devices. Wires with .025" plastic insulation are designed for use inside or outside the chassis but within the radio cabinet. The operating temperature limit for these wires is 80 C (176 F).

8901	25' CK 100' SK 1000' S	20	Tinned copper, solid; vinyl plastic insulation Colors: Block, Yellow, Blue, White, Green, Brown, Red, Oronge	solid	.015	.066	5000	8000
8909	25' CK 100' S K 1000' S	20	Tinned copper, solid; vinyl plastic insulation Colors: Black, Yellow, Blue, White, Green, Brown, Red, Orange	solid	.025	.086	5000	12000
8858	Content Green, R	ts: 6 I	DISPLAY ASSO			e each	Block, B	lue,

Tinned copper, flexible stranding; vinyl plas-tic insulation



3	8905	100' SK 1000' S	20	Colors: Black, Yellaw, Blue, White, Green, Brawn, Red, Orange	10x30	.015	.075	5000	8000
	8913	25' CK 100' S K 1000' S	20	Tinned copper, flexible stranding; vinyl plas- tic insulation Colors: Block, Yellow, Blue, White, Green, Brown, Red, Oronge	10x30	.025	.093	5000	12000



DISPLAY ASSORTMENT

Contents: 6 Rolls 8913 Size 20 flexible; vinyl plastic. One each Block, Blue, Green, Red, Yellow, and White.

†CK—Coiled in carton

K-Carton

25' CK 100' SK

2005

8859

CR—Crate reel

S-Spool

SK-Spooled in carton C-Coil

^{*}Measurements for d-c insulation resistance were made by means of a megohm bridge at 300 volts on specimens in mercury after subjection to 90% relative humidity and 100 F for 24 hours.

BELDEN • intercommunicating and sound system cables

ILLUSTRATION AND APPLICATION	Trade Number	Lengths and †Package	A. W. G. and No. Condrs.	No. Pairs	GENERAL CONSTRUCTION	Tinned Copper Shielding	Stranding 1	Condr. nsulation hickness (inches)	Finished Cable O D (inches)
	8740	100′ S 500′ S	22-2		Bare copper, solid; heavy form- var enamel coating; cotton braid; waxed; color coded; con-	None	solid		.130
For Station-to-Station and Extension Wiring	8741	100' S 500' S	22-4		luctors cabled; over-all brown - cotton braid	None	solid		.200
(Unshielded)	8742	100′ S 500′ S	22-6	3	-	None	solid		.225
	8743	100' S 500' S	22-12		Tinned copper, solid; vinyl plastic insulated, color coded;	None	solid	.010	.275
	8744	100' S 500' S	22-18	9	conductors cabled in pairs; - over-all brown cotton braid	None	solid	.010	.320
	8745	100' S 500' CR	22-30	15		None	solid	.010	.415
	8746	100' \$ 500' CR	22-54	27	-	None	solid	.010	.535
	8734	100′ S 500′ S	22-3	Not paired	Tinned copper, flexible stranding; vinyl plastic insulation, color coded; three conductors cabled, one conductor tinned copper braid shield, and two conductors unshielded; over-all brown cotton braid	Over l con- ductor	7x30	.010	.155
	8735	100' \$ 500' \$	22-3	Not	Tinned copper, flexible stranding; vinyl plastic insulation, color coded; three conductors cabled; tinned copper braid shield; over-all brown cotton braid	Over 3 cabled con- ductors	7x30	.010	.170
For Station-to-Station and Extension Wiring (Shielded)	8737	100′ \$ 500′ \$	22-2	1	Tinned copper, flexible stranding; vinyl plastic insulation, color coded; conductors cabled; tinned copper braid shield; over-all brown cotton braid	Over 2 cabled con- ductors	7x30	.010	.155
	8738	100′ S 500′ S	22-2	1	Bare copper, solid; heavy form- var enamel coating; cotton braid; waxed; color coded; con- ductors cabled; tinned copper braid shield	Over 2 cabled con- ductors	solid		.125
Simular Samular Samula	8739	100' \$ 500' \$	22-2	1	Same as 8738 plus over-all brown cotton braid	Over 2 cabled con- ductors	solid		.160
	8747	100′ S	22-12	6	Tinned copper, flexible stranding; vinyl plastic insulation, color coded; conductors cabled	None	7x30	.010	.305
	8748	100′ S	22-18	9	in pairs; over-all brown cotton braid	None	7x30	.010	.350
The same of the sa	8749	100′ S	22-30	15		None	7x30	.010	.445
For Station-to-Terminal Wiring (Unshielded)	8750	100′ S	22-54	27		None	7x30	.010	.565
	8751	100′ S	25-12 16-2	Not paired	Bare copper, flexible stranding; vinyl plastic insulation, parallel thread for color coding; 12 con- ductors 25-ga individually shielded, cabled (not paired) with 2 conductors 16-ga un- shielded; over-all brown cotton braid	Over each 25-ga con- ductor only	7x33 19x29	.015	.335
For Station-to-Terminal Wiring (Shielded)	8752	100′ S	25-22 16-2	Not paired	Same construction as 8751 except 22 conductors 25-ga individually shielded	Over each 25-ga con- ductor only	7x33 19x29	.015 .012	
	8799	100′ \$ 500′ \$	18-2	1	Bare copper, solid; heavy form- var enamel coating; cotton wrap; cotton braid; waxed; color coded; conductors cabled; tinned copper braid shield	con-			.165
P. A. Cable—Amplifier-to-Speaker	8432	100′ S 500′ \$	20-2	Not paired	Tinned copper, flexible strand- ing; paper wrap; rubber insula- tion; cotton braid; laequel coating; color coded; con- ductors cabled; tinned copper braid shield	Over- all	10x30	.015	.215
†CK—Coiled in carton K—Carton	8433	100' \$ 500' \$ Crate ree	20-3	Not paired Spool	l C—Coil SK—Spooled in	Over- all carton	10x30	.015	.230

BELDEN • instrument and lead wires

photoelectric cell cable

Trade Number	Lengths 1 Package and Color	A.W.G.	GENERAL CONSTRUCTION	Stranding	Finished Cable O.D. (inches)	Nominal Capacitance Per Ft (mmf)
8221	100' S Black	25	Tinned copper and tinned steel, flexible stranding; cellu- lose yarn braid, polyethylene insulation; tinned copper braid shield; black vinyl plastic jacket	3x33 copper 4x33 steel	.240	20
rm ca	ble		10 10 10 10 10 10 10 10 10 10 10 10 10 1	7		
8431	100′ \$ Brown	24	Tinned copper, flexible stranding; rubber insulation; tinned copper braid shield; fine brown cotton braid	16x36	.010	.085•
8014	25′ ** 500′ \$ K Chrame	25	Tinned copper, flexible stranding; chrome vinyl plastic insulation Packaged 25 ft on card, 5 cards	13x36	،010	.044
d cable	е					
8869	25' S 100' S Red with Twa White Tracers	20	Tinned copper, flexible stranding; polyethylene plastic insulation, red cotton braid with 2 white tracers; lacquer coating	7 x 28 0	35 .145	10000
8868	25' \$ 100' \$ Red	20	Same as 8869 except heavier insulation and solid red braid	7x28 1/	16 .205	20000
					777	
8899	††14′ C K 100′ S 1000′ S Red Black	18	Tinned copper, extra flexible stranding; cotton wrap; rub- ber insulation	65x36 .0	043 .140	5000
	100'S 500'S			65x36 .0	088 .230	10000
	8221 rm cal 8431 8014 d cable 8869	Trade Number Lengths Package and Color	Trade Number Lengths Package A.W.G.	Trade Number Second Package Package Package Package	Number Package Number Package Construction Stranding	Trade Number Number Numbe

		_		
ma	and	et 1	WI	re

APPROX. LENGTH IN FEET Size 1/4 - Lb Soool 1/2 - Lb Soool

SINGLE COTENAMEL

						riicii	inch	74 - FD 2000I	1/2-Lb Spool
					14	14.1	199		39
					16	17.4	303		61
					18	21.4	458		97
					20	26.1	681	* * * * *	154
	n.			*	22	31.9	1018	4 9 9 4	241
	. BI	ELDENAN	161		24	38.6	1490		376
_					26	46.4	2153	295	590
	Turns	Turns	APPROX. LEI	NGTH IN FEET	28	55.1	3036	458	916
Size	Per Linear Inch	Per Square Inch	1/4-Lb Spool	1/2·Lb Spool	30	64.7	4186	710	1420
	111011	Hien	74 E8 Spool	72 EB 3900.	32	74.6	5565	1090	2180
					34	86.6	7500	1606	
14	15.2	231		40	36	97 .6	9526	2425	
16	19.1	365		62	-				
18	23.9	571		100	,				
20	29.9	894		160		SINGLE	NYLTEX	ENAMEL	
. 22	37.4	1399		250					
24	46.9	2200		400					
26	59.0	3481		638	22	34.9	1218		248
28	73.8	5446	505	1010	24	43.1	1857		390
30	92.2	8501	805	1610	26	52.9	2798	309	618
32	114.0	12996	1270	2540	28	64.5	4160	487	974
34	144.0	20736	2015	4030	30	78.1	6059	770	1540

†CK-Coiled in carton K-Carton CR-Crate reel S-Spool C-Coil SK-Spooled in carton

6400

3200

5070

8050

36

38

4()

180.0

225.0

290.0

32400

50625

84100

2404

1202

1892

2854

93.4

113.0

134.2

32

8723

12769

18009

BELDEN • replacement and extension cords

each cord bears Underwriters' label of approval

-	Trade Number	Lengths †Package and Color	A.W.G.	GENERAL Insulation Cable Voltage* CONSTRUCTION Stranding Thickness 0,D. Rating (inches) (volts)
	1701	1 K	10 Ft Brown	Extension Cord—Size 18, Type POSJ-64. Extra- flexible all-rubber parallel lamp cord. Both ends un- breakable rubber. Does not mar floors or furniture, Safe for use on table tops.
	1702	1 K	15 Ft Brown	
	1705	1 K	6 Ft Brown	
	1751	1 K	25 Ft Black	Extension Cord—Size 18, Type SV. All-rubber portable cord with Belden molded-on all-rubber connector and Belden unbreakable soft rubber plug.
	1725	1 K	7 Ft 6 In. Brown	Replacement Cord—Size 18, Type POSJ-64. Extra- flexible all-rubber parallel lamp cord with Belden unbreakable soft rubber plug; opposite end stripped and tinned—ready for easy attachment. For lamps, radios, small appliances.
	1749	1 K	6 Ft 3 In. Black	Replacement Cord—Size 18, Type SV. All-rubber portable cord with Belden unbreakable soft rubber plug; opposite end stripped and tinned—ready for easy attachment. For amplifiers, test equipment and small appliances.
	8874	1 K	6 Ft Brown	Television Power Supply Connector Cord. Original equipment on most television sets. Size 18, Type POSJ-64. Extra-flexible all-rubber parallel lamp cord with Belden molded-on all-rubber connector and Belden unbreakable soft rubber plug.
	8125	10 K		Male Connector—Flush mounting for use with 8874 cord connector set.
headphone cords		1 K	5 Ft	Headphone Set, Pin tips all ends. 5 Ft of extra-flexible moisture-resistant rubber insulated tinsel cord. Over-all



Brown 8872

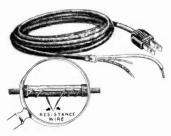
moisture-resistant rubber insulated tinsel cord. Over-all durable brown cotton braid. "Y" arm sections 15", coupled in series.

8873

5 Ft Brown

Headphone Set, Spade tips 4 phone ends. Pin tips plug end. 5 Ft of extra-flexible moisture-resistant rubber-insulated tinsel cord; over-all durable brown cotton braid. "Y" arm sections 15", coupled in series.

AC • DC resistance cord



To determine the proper ac-dc line cord, add the filament voltages of the individual tubes in the receiver. From the chart at right, select the nearest figure under the heading SUM OF TUBE VOLTAGES in the column headed by the available power supply. Length 6 ft. Size 18.

Trade -			0.15	Voltage	*Sum of Tube Voltages for			
Number		Resistance (ohms)	Color Marker	Drop at 0.3 Amps.	110 Volt Line	115 Volt Line	120 Volt Line	
8920	1 K	135.	Green	40.5	69.5	74.5	79.5	
8921	1 K	165.	Yellow	49.5	60.5	65.5	70.5	
8976	1 K	180.	Orange	54.	56.	61.	66.	
8929	1 K	220.	Blue	66.	44.	49.	54.	
8977	1 K	250.	Grey	75.	35.	40.	45.	
8922	1 K	290.	Black	87.	23.	28.	33.	
8923	1 K	330.	Brown	99.	11.	16.	21.	
8924	1 K	560.	White	**84.	26.	31.	36.	
8925	1 K	960.	Red	***72.	38.	43.	48.	

^{*}When line voltages other than those shown must be used, subtract sum of tube voltages from available line voltage to obtain voltage drop. The nearest figure in "Voltage Drop" column gives proper ac-dc cord to use.

Voltage drop at 0.175 amps. *Voltage drop at 0.75 amps.

BELDEN • Price List

Belden Trade Number	Unit Package & Length**	Suggested List Price Each	Belden Trade Number	Unit Package & Length**	Suggested List Price Each		Unit Package & Length**	Suggested List Price Each	Belden Trade Number	Unit Package & Length**	Suggested List Price Each
1701 1702 1705 1706 1709 1712 1715 1725	Brown	\$1.30 1.45 1.20 2.40 2.75 3.00 3.25 .55	8422 8422 8423 8423 8424 8424 8425 8425 8425	100' 500' 50' 250' 250' 250' 250' 250' 100'	\$.09' .09' 5.00 .11' 6.25 .14' 7.25 .16' .20'	8810† 8817 8833† 8833† 8834† 8834† 8837† 8837†	1000' 100' 100' 1000' 1000' 25' 100' 1000'	\$.02' .40 .03' .03' .02' .02' .50 1.95	8905† 8905† 8905† 8909† 8909† 8909† 8913† 8913†	25' 100' 1000' 25' 100' 1000' 25' 100' 1000'	\$.40 1.25 .015' .40 1.35 .015' .45 1.55
1751 *1777 8000 8000 8000 8000 8002 8002 8002 8	50' 75' 100' 1000' 75' 100' 1000' 75' 100' 175'	2.15 .90 .70 1.00 1.25 11.40 .53 .70 .90 7.75 1.35	8427 8431 8432 8432 8433 8433 8443 8443 8444 8444	100' 100' 100' 500' 100' 500' 100' 500' 100' 500' 100'	.21' .04' .07' .07' .09' .09' .045' .06' .06'	8838† 8838† 8838† 8839† 8839† 8839† 8841† 8841† 8841† 8842†	25′ 100′ 1000′ 25′ 100′ 1000′ 25′ 100′ 1000′ 25′ 100′		*8918 *8918 8920 8921 8922 8923 8924 8925 8929 8938† 8938†	250′ 1000′ 25′ 1000′	.025' .025' 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25
8005 8005 8006 8006 8008 8008 8008 8009 8009 8011	100' 1000' 100' 100' 100' 200' 500' 100' 500' 100'	1.80 16.00 3.00 28.25 1.95 3.75 9.00 1.35 6.00 1.95	8445 8446 8447 8448 8449 8452 8452 8453 8453 8454	500' 100' 100' 100' 100' 100' 500' 100' 500'	.07' .10' .11' .12' .05' .05' .07' .07'	8842† 8844† 8844† 8858 8859 8860 8861† 8861†	1000' 25' 100' 1000' 25' 100' 1000'	.02′ .60 2.25 .025′ 2.40 2.70 2.80 .55 2.05	8938† 8941† 8941† 8941† 8942† 8942† 8942† 8943† 8943†	500° 25° 100° 1000° 25° 100° 1000° 25° 100°	.015' .45 1.65 .015' .60 2.40 .025' .50 1.80
8012 8013 8014 8014 8102 8103 8104 8125 8126	100′ 100′ 25′ 500′	1.40 1.05 .30 .015' .15 .15 .20 .20	8454 8455 8455 8462 8462 *8462 *8482 *8482 *8483 8484	500' 100' 250' 100' 250'	.08' .10' 10' .03' .03' .08' .015' .025'	8862† 8862† 8862† 8863† 8863† 8863† 8864 8865 8868	25' 100' 1000' 25' 100' 1000'	.70 2.65 .03' .60 2.45 .025' 2.70 3.00 1.55	8945† 8945† 8945† 8945† 8947† 8947† 8947† 8976 8977 8989	25' 100' 1000' 25' 100' 1000'	.02' .50 1.90 .02' .55 2.10 .025' 1.25 1.25
8127 8200 8200 8200 8201 8201 8201 8201 8201	10° 100° 500° 1000° 50° 100° 250° 500° 1000° 500°	.23 .015′ .015′ .015′ .015′ .88 .02′ .02′ .02′ .02′	8484 8650 8651 8652 8654 8655 8656 8657 8658 8660	1000' 100' 100' 100' 100' 100' 100' 50' 50'	.045′ .08′ .06′ .05′ .10′ .08′ .07′ .11′ .13′	8868 8869 8869 8872 8873 8874 8885 8885 8885 8885	25′ 100′ 25′ 100′ 25′ 100′ 500′ 250′	.055′ 1.00 .03′ 1.25 1.15 .70 1.00 .04′ .04′	8989 8989 8989 8992 8992 8993 8993 8993	100 1000 25c pkg. 100 1000 25c pkg. 100	25 .75 5.00 .25 .75 5.00 .25 .65 3.75 .65 .25
8205 8206 8209 8210 8210 8221 8222 8222 8223 8223	500° 250° 500° 100° 500° 100° 500° 100° 500°	.03' .02' .08' .07' .07' .09' .02' .02'	8660 8661 8662 8662 8662 8664 8665 8667 8668	250' 50' 250' 50' 250' 100' 100' 100' 250'	.035' .05' .05' .19' .19' .09' .09' .05'	8890 8892 8895 8896 8897 8898† 8898† 8899† 8899†	100′ 500′ 14′ 100′ 1000′	.30 .20 1.10 .55 .25 .04' .04' .50 .025'	8995 8995 8996 8996 8996 8997 8997 8997 8998	25c pkg. 1000 25c pkg. 100 1000 25c pkg. 100 1000 25c pkg. 100 1000 25c pkg.	3.75 .25 .65 3.75 .25 .65 3.75 .25 .65 3.75
8224 8224 8225 8225 8225 8226 8226 8227 8227 8227 8228	100' 500' 100' 500' 1000' 100' 500' 100' 500' 100' 250' 100'	.03' .04' .04' .04' .09' .09' .14' .14'	8669 8734 8734 8735 8735 8737 8737 8737 8738	50° 250° 100° 500° 100° 500° 100° 500°	.15' .09' .09' .09' .09' .07' .07' .04'	**Please	indicate len when more	1.00 .015' Color. All p	8998 8999 8999 8999 orices sub	1000 25c pkg. 100 1000 ject to change ately followin isted under t	2.50 .25 .50 3.10 without
8229 8229 8235 8235 8336 8309 83320 8321 8322	500' 100' 500' 100' 500'	.07' .08' .08' .08' .08' 3.45 2.30 7.50 4.25 12.65 1.90	8739 8739 8740 8740 8741 8741 8742 8742 8742 8743 8743	100' 500' 100' 500' 100' 500' 100' 500' 100' 500' 100' 500'	.06' .05' .03' .06' .06' .07' .07' .09' .09'	BELDEN MAGNET Su Lis	ggested tt Price l. 1/2 lb. s Spools	List 1/4 lb. Size Spools	MEL WIRE pested Price 1/2 lb. Spools	List 1/4 lb. Size Spools	AMEL WIRE ested Price
3401	50'	3.75	8744	500′	13'	16 —	\$.70 70	14 — 16 —	\$.75 .80	18 — 20 —	_

BELDENAMEL MAGNET WIRE	SINGLE COTENAMEL MAGNET WIRE	SINGLE NYLTEXENAMEL MAGNET WIRE
Suggested List Price	Suggested List Price	Suggested List Price
Size Spools Spools	1/4 lb. 1/2 lb. Size Spools Spools	Size Spools Spools
14 — \$.70 16 — .70 18 — .70 20 — .70 22 — .70	14 — \$.75 16 — .80 18 — .85 20 — .90 22 — .95	18 — — 20 — \$1.10 22 — \$1.25 26 \$.80 1.45
24 — .70 26 — .75 28 \$.50 .80 30 .50 .95 32 .55 .95	24 — 1.05 26 \$.65 1.15 28 .70 1.30 30 .85 1.60 32 1.00 1.85	28 .90 1.70 30 1.15 2.15 32 1.35 2.50 34 1.70
34 .60 1.05 36 .75 1.30 38 .95 — 40 1.35 —	34 1.35 — 36 1.60 —	

50' 100' 500' 25' 50' 100' 500' 25' 100' 25'

50′ 100′ 500′ 25′ 50′

3.75 .08' .08' 2.50 5.00 .10' .10' 1.55 .06' 2.40

4.75 .10' .10' 2.25 4.50

8752 8799 8799 8810† 8810†

500' 100' 500' 100' 100' 100' 100' 100'

100′ 100′ 500′ 25′ 100′

.13' .21' .21' .34' .34' .13' .18' .28' .48'

.65′ .05′ .05′ .55 2.00

Thank You!

When writing for additional information or when ordering from sources of supply listed in this book, please mention

RADIO'S MASTER



RADIO AND TELEVISION WIRE PRODUCTS

P-A WIRES and CABLES HOLLYWOOD MICROPHONE CABLES (Shielded-Jacketed)

Substantially made to withstand rough usage. Special low capacity color coded conductors. Braided with tinned copper shield. Tough weatherproof polished jacket overall.

Single Conductor — unusually low capacity. Can be used up to 100 ft. with high impedance ribbon microphones and up to 50 ft. with crystal microphones.



Cat. No.	Conductors	Approx. Feet on Spool	Approx. Outside Diam.	List Price M ft.
1105	1	100	32"	\$85.00
2104	1	500	32"	82.00
2101	1	1000	9 " 3 2	80.00



Two Conductor, for low impedance microphones and transmission lines.

1152	2	100	11"	\$105.00
1153	2	250	11"	102.00
2152	2	500	11"	100.00
1154	3	100	11"	130.00
1155	3	250	11"	127.00
2153	3	500	11"	125.00
1156	4	100	3½″	160.00
1157	4	250	%"	157.00
2154	4	500	%″	155.00

LAPEL MICROPHONE CABLE



Similar to No. 2101 except smaller in diameter.

1160	1	100	.175"	\$75.00
1161	1 '	500	.175"	
2160				72.00
2100	1	1000	.175"	70.00

SHIELDED CABLES



These cables are recommended for sound recording equipment and P.A. systems where a flexible shielded cable is necessary. Each conductor consists of multistrand copper wire cotton served, rubber covered and braided with color-coded cotton. Conductors No. 20 gauge unless otherwise specified.

Cat. No.	Put-Up	List Price per M ft.
1114	100' Spool 2 Conductor	\$ 78.00
1115	250' Spool 2 Conductor	75.00
1116	100' Spool 3 Conductor	108.00
1117	250' Spool 3 Conductor	105.00
1118	100' Spool 4 Conductor	135.00
1119	250' Spool 4 Conductor	132.00
1120	100' Spool 5 Conductor	161.00
1121	250' Spool 5 Conductor	158.00
1122	100' Spool 6 Conductor	183.00
1123	250' Spool 6 Conductor	180.00

SHIELDED CABLES-COTTON BRAID OVERALL

Cat. No.	Put-Up	List Price per M ft.
1124	100' Spool 2 Conductor	\$ 98.00
1125	250' Spool 2 Conductor	95.00
1126	100' Spool 3 Conductor	135.00
1127	250' Spool 3 Conductor	132.00
1128	100' Spool 4 Conductor	163.00
1129	250' Spool 4 Conductor	160.00
1130	100' Spool 5 Conductor	193.00
1131	250' Spool 5 Conductor	190.00
1132	100' Spool 6 Conductor	223.00
1133	250' Spool 6 Conductor	220.00

RADIO BATTERY CABLE AND DYNAMIC SPEAKER EXTENSION CABLE

Multi-conductor cables having flexible conductors with overall heavy cotton braid. Individual conductor consists of stranded copper, rubber covered with color-coded cotton braid. Suitable to all types of P.A. Systems. Conductors No. 20 gauge.

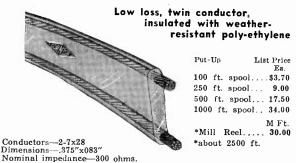
No. Put up in spool 228 3 Wire-100 Ft. 219 4 Wire-100 Ft. 221 5 Wire-100 Ft.	st Price Cat. er M ft. No. 70.00 241 85.00 222 100.00 223 120.00 224 1	Put up in spool 7 Wire-100 Ft. 8 Wire-100 Ft. 9 Wire-100 Ft. 10 Wire-100 Ft.	List Price per M ft. \$137.00 153.00 170.00 188.00
--	--	--	---

SHIELDED LEAD-IN AND GROUND WIRE

These products are made of flexible stranded copper conductors insulated with a substantial wall of high grade rubber with an overall of close tinned copper shield. They are most frequently used as a shielded down lead to ground out interference noises.

No. 20 1/32" R.C. $\frac{\text{List Price}}{\text{Price}}$ No. 18 1/32" R.C. $\frac{\text{List Price}}{\text{Price}}$ 1143—50 Ft. Coil....\$ 1.80 1146—50 Ft. Coil....\$ 2.10 1144—250 Ft. Spool... 8.00 1147—250 Ft. Spool... 9.25 1145—1900 Ft. Spool... 30.00 1148—1000 Ft. Spool... 35.00

300-OHM TELEVISION DOWN-LEAD



RG-59U COAXIAL CABLE



Conductor Size 22, O.D., 250", Impedance 75 ohms

Put-Up	List Price
100 Ft. Spool	\$10.20 ea.
500 Ft. Spool	49.75 ea.
Mill Real (about 2500 ft.)	95.00 M Ft.



RADIO AND TELEVISION WIRE PRODUCTS

INTERCOMMUNICATION CABLES



Conductors are No. 22 solid tinned copper insulated with either vinyl plastic or double cotton impregnated braid—cabled in color-coded twisted pairs—with overall cotton braid.

Cat. No.	Put-Up	Width	List Price per M ft.
1225	2 Pair (O.D.	approx. 18") approx. 18")	\$ 54.00
1226	6 Pair (O.D.		153.00
1227	13 Pair (O.D.		325.00
1228	26 Pair (O.D.		640.00

TWO CONDUCTOR SHIELDED CABLE



Consists of two No. 20 solid tinned copper plastic insulated conductors, color-coded and twisted with overall close tinned copper shield.

| No. | 1230 |
 | | |
 |
 | \$4 | 15.0 | U |
|-----|------|------|------|------|------|------|------|------|--|--|------|------|-----|------|---|

THREE CONDUCTOR CABLE

3 Conductors are No. 20 solid tinned copper, plastic insulated, color-coded, twisted, with overall treated cotton braid.

No. 1231\$42.00

THREE CONDUCTOR (One Shielded)

Consists of a twisted pair of No. 20 solid tinned copper plastic insulated wires, and a single No. 20 solid tinned copper plastic insulated and shielded, all twisted, with over-all dry cotton braid.

No.	1232									\$75.00
No.	1233-	-Same	8.8	No.	1232	except	conductors	are	No.	22
		solid								\$63.00

FLEXIBLE CORDS (Fixture Wires - Lamp Cords).

Fixture wires often used as all-purpose radio and lead-in wire. Lamp cords used for power supply and extension cords. Colors: Brown, Black, Ivory.

Cat. No.	Put-Up	List Price per M ft.
3050-No. 18 Single, Type F, Cotton	1000 ft.	\$17.50
*3020-No. 18 Parallel, Type PO, Rayon		
*3000-No. 18 Parallel, Type POSJ, All Rubber.	. 250 ft.	32.50
*3300-No. 18 All Rubber Service Cord, Type SJ.	. 250 ft.	
*3500-Replacement Cord Set-6 ft. 18/2, POSJ	,	
1/64 with Molded Rubber Plug		40 ea.
*Has Underwriter's Labels.		

AERIAL WIRE

STRANDED BARE WIRE - Copper

No.	Ft.	Size	List Price
40A	75-ft. coil	7/22	\$ 1.07
40	100-ft. coil	7/22	1.40
40B	1000-ft. spool	7/22	14.00
42A	75-ft. coil	7/24	.75
42	100-ft. coil	7/24	.95
42B	1000-ft. spool	7/24	9.50

LEAD-IN WIRE

STRANDED-Rubber Covered

No.	Ft.	Size	List Price	No.	Ft.	Size	List Price
300	50' coil	18-32"	\$.60	302	500' spool	18-32"	\$5.50
301	100' spool	18-32"	1.10	303	1000' spool	18-32"	10.50

LEAD-IN WIRE

SOLID-Rubber Covered

No.	Ft.	Size	List Price	No.	Ft.	Size	List Price
320 321 322 323	25' coil 50' coil 500' spool 1000' spool	$18 - \frac{3}{64}"$ $18 - \frac{3}{64}"$ $18 - \frac{3}{64}"$ $18 - \frac{3}{64}"$	\$.32 .57 5.25 10.00	330 331 332 333	25' coil 50' coil 500' spool 1000' spool	$\begin{array}{c} 20 - \frac{3}{64}" \\ 20 - \frac{3}{64}" \\ 20 - \frac{3}{64}" \\ 20 - \frac{3}{64}" \end{array}$	\$.28 .51 4.75 9.00

TWISTED PAIR DOWNLEAD

Two conductors, each No. 22 stranded copper, 1/32" rubber-covered (one black, one red), twisted and covered with overall black weatherproof braid.

No. 122-	List Mft	\$30.00
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"NOFLAME-COR"— The Television Hook Up Wire



For the first time a hook-up wire for the trade with Underwriters' Label attached. The famous "NoFlame-Cor" wire is approved for 90°C—600 voltusage

	6.	SOLID		STRANDED					
Cat.	Size	Put-up	List Each	Cat. No.	Size	Put-up	List Each		
470	22	100' spool	\$2.25	473	22	100' spool	\$2.45		
471	20	a	2.55	474	20	"	2.80		
472	18	44	3.15	475	18	**	3.40		

RADIO HOOK-UP WIRE

"CORLAC" HOOK-UP WIRE

Special under-insulation makes this hook-up wire moisture-proof and gives voltage break-down of 3100 volts (as per certified report of Electrical Testing Laboratory, N. Y. C.). Excellent push-back in waxed finish. Tinned copper conductors.

WAXED				LACQUERED			
Cat. No.	Put-	Up	List Each	Cat. No.	Put	-Up	List Each
			No. 22	SOLID			
434 2	Ft.	Cartons	\$.40	452- 2	5 Ft.	Cartons	.46
436100	Ft.	Spools	10.60	454-100	0 Ft.	Spools	12.50
			No. 20	SOLID			
437 2	Ft.	Cartons	.48	455— 2	5 Ft.	Cartons	.56
						Spools	
		N	o. 22 ST	RANDED			
443— 2	5 Ft.	Cartons	.44	461— 2	5 Ft.	Cartons	.50
445-100	Ft.	Spools	12.00	463100	0 Ft.	Spools	14.00
		N	o. 20 ST	RANDED			
446 2	5 Ft.	Cartons	.52	464— 2	5 Ft.	Cartons	.58
448-100) Ft.	Spools	14.50	466-100	0 Ft.	Spools	17.00
		N	o. 18 ST	RANDED			
449 2	5 Ft.	Cartons	.64	467— 2	5 Ft.	Cartons	.72
451-100) Ft.	Spools	19.00	469100	p Ft.	Spools	22.5

Flexible Bare copper conductor with brown cotton braid.

661	1000 Ft. Spools	\$10.00
661 A	25 Ft. on Fibre	.33

TEST LEAD WIRE

A super flexible conductor covered with heavy live rubber. Will not wear, kink or crack. Made in Black and Red. Mention color when ordering. O.D.—.140".

1140	100 Ft. Spools	\$ 3.00
1141	500 Ft. Spools	13.00
1142	1000 Ft. Spools	25.00
1142	1000 Ft. Spoots	20.00

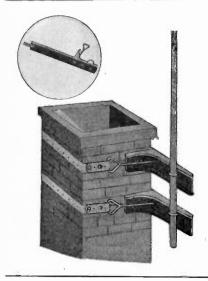
Thank You!

When writing for additional information or when ordering from sources of supply listed in this book, please mention

RADIO'S MASTER



Birnbach TV-FM ANTENNA **ACCESSORIES**



THE NEW MODEL No. 6000

BASE CHIMNEY MOUNT ANTENNA

Installation men have for years shown their preference for Birnbach Products - now, once again Birnbach shows the way. The New Birnbach Chimney Mount Antenna Base No. 6000 has received a ready and sensational acceptance. Its ease of installation, its unusual durability, versatility, and last but not least its very low price have all added up now once again, as in the past, that Birnbach has shown the way to quality at a low, low price.

Here it is . . . The New Birnbach Chimney Mount Antenna Base Model 6000 for . . .

FM • TELEVISION • AMATEURS

A Few of Its Many Features:

- Simple One Man Operation Sharply reduces installation time and cost.
- No Drilling
 No special tools no special equipment.
- Fits All Chimneys and adaptable for posts, corners of buildings, etc.
- Two Seperate Sections
 Longer distance between sections allows maximum mast support.

No. 6000 - Complete

 Base Castings Made of Strong Corrosion-Resistant Die Cast Aluminum Alloy highest possible tensile strength.

- · Easily Installed at Highest Elevation.
- Fits Masts 5/8" to 11/2" O.D.
- Complete With All Hardware 2 12-ft. steel strapping, etc., ALL COMPLETELY RUST-RESISTANT.
- Simple Instructions.

List Price \$5.50 Per Pair



WOOD SCREW ANCHOR

Especially designed to give permanent anchorage in any kind of masonry for insulated ribbon, coaxial or similar type standoffs. Threaded to take No. 10 Wood Screws and to fit 3½" dia. hole. After partially inserting the threaded end of the standoff into this wood screw anchor and then using a pair of pliers to dig deeper into the anchor you have positive assurance of a permanent trouble-free installation. Rustproof, galvanized steel.

No. 7039

Standard Package 100

List Price \$11.00 per C



MACHINE SCREW ANCHORS

These anchors are tapped for ¼" machine screw bolts. Takes a ½" dia. hole and comes with a ¾" long bolt. Gives permanent anchorage. Used for fastening wall mounts brackets and pipe straps to any type of masonry. Free tamping tool with each 100 anchors.

No. 7040 Stand. Pack. 100 List Price \$20.00 per C



ANCHOR BOLT ASSEMBLIES

This is the standard anchor used by installation companies for fastening wall mounts and pipe straps to masonry. Cannot pull out. Rustproofed. The ¼" bolt comes with anchor and nut complete. Hole dia. ½". Available in 2" and 3" lengths of bolt. Designed to give permanent anchorage. Corrosion-proof. Fee tamping tool with each 100 bolts.

Standard Package 100 Standard Package 100

List Price \$15.00 per C List Price 15.00 per C



PIPE HANGER

Made of galvanized steel, this pipe hanger can be used for fastening poles, masts and other objects to walls, roofs, gables, etc.

Stand. Pack. 100 List Price \$0.10 ea.



LAG BOLTS

For permanently holding brackets, etc., in place. Made of galvanized steel, this sturdy bolt screws easily into wood, brick, etc. Available in four sizes: 1", 1½", 2'. 3". Specify size.

No. 7043 Stand. Pack. 100 List Price \$9.00 per C



EYE BOLT ASSEMBLIES

Designed for permanent anchoring of guy wires, cables, brackets, etc., in brick or masonry. Cannot pull out. Made of 1/4" material. Overall length 21/2". Dia. of eye 3/8". Hole dia. 3/8". Rustproofed. Use tamping tool No. 7046.

No. 7044 Stand, Pack 100 List Price \$18.00 per C



PIPE BOLT ANCHORS

Used to mount pipe poles or antenna masts directly onto brick or masonry. Cannot pull out. Made of 1/4" stock for 1/2", 34" and 1" pipe. A very useful and superior bolt. Rustproofed. Use tamping tool No. 7046.

No. 7045 Stand. Pack. 100 List Price \$28.00 per C

TAMPING TOOLS



Special Tamping Tool for anchoring eye bolts and pipe bolts. No. 7046 List Price \$4.75 ea.



Tamping Tool for 14" anchor bolts. No. 7047 List Price \$2.00 ea.

3 IN 1 TOGGLE BOLTS

Strongest toggle bolt obtainable. Used for bolting or mounting to wood, hollow concrete, tile partitions or plaster walls. Can be used with nut end or so ew end in wall. Bolt dia. ¼". Bolt length 3". Rustproofed.

No. 7048 Stand, Pack, 100 List Price \$22.00 per C

STAR DRILLS



Made of hand-tempered and hand-forged high-grade tool steel for hand drilling in brick, stone and concrete. Standard package 12. No. 7049—36 " x 8" long List Price \$0.85 ea.
No. 7050—14 " x 8" long List Price .90 ea.



Birnbach TV-FM ANTENNA ACCESSORIES

NEW ALL CHANNEL INDOOR TELEVISION ANTENNA



Can be Used on All Television Sets Flexible Folded Dipole Antenna of Television—covers all Tele-vision Channels (1-13) and FM. No problem to install indoors, Can be placed anywhere; in attic,

under rugs, or any out-of-the-way location. Works on any television set. Freq. range 44-216 me. 10 ft. 300-ohm lead transmission line. Instruction sheet included. Individually boxed.
No. 7031 List Price \$2.95 ea.

FLEXIBLE FOLDED DIPOLE ANTENNAS



For Television (TV) For Television (TV)

The flexible folded dipole antenna for Television is perfect for indoor use. This antenna can be placed in attics or in apartment houses; it can be placed under rugs, behind large couches, behind drapes covering windows, etc. This aerial can be oriented for best reception over all television stations. The new Birnbach indoor Television Antenna should prove a real seller for you. Transition loss measures 2.85 DB in television band.

No. 7027-Flexible Folded Dipole Antenna for Television (TV).
List Price (Individually Boxed) \$1.95 ea.
No. 7027HF—List Price (Individually Boxed) 1.50 ea.

For Frequency Modulation (FM)

The flexible folded dipole antenna for FM is excellent for all FM receivers. With the new FM Converters and Tuners now on the market you can enjoy a very lucrative sale on this low-priced antenna. Losses in line measure .85 DB per 100 feet at 100MC.

No. 7026—Flexible Folded Dipole Antenna for Frequency

For above antennas with 50 ft. lengths of 300 ohm Transmission Line add \$2.00 to the list price.

An attractive display card furnished to aid you in the sale of our two new products.



GUY WIRE CABLE CLAMPS

(VIBRATION-PROOF)

New Vibration-Proof Lock Clamps for positive grip on guy wire. Weather-proofed throughout. Standard package 100. No. 762..... List Price \$0.20 ea.





 Made of special nickel-plated spring brass on a porcelain base. Serew terminals located conveniently for easy connections in circuit. Has two holes for incounting.
 No. Description
 Standard Package
 List Price 100—8.7
 St. Price 500—8.8
 S. T.
 0.
 5.5
 ca.
 6102—8.1
 0.
 7.5
 ca.
 6103—D.P.
 7.7
 ca.
 7.7
 ca.

No. 6104 is widely used for switching from one television antenna to another.



U BOLT

Useful for mounting poles to steel plates, wooden sections, etc. Nuts and washers supplied. $2\,\frac{1}{4}''$ overall; $1\,\frac{1}{4}''$ thread length; $1\,\frac{1}{2}''$ distance between legs, $\frac{1}{4}\cdot 20$ size thread.

No. 7035 Standard Package 50 List Price \$0.30 ea.



This %" Non Metallie Loom is used for the protection of twin lead and Coax Cable on relevision installations. Use short sections of this always are eiges such as corners of buildings, fire escapes, etc. Use friction tapt to keep loom in place by binding the end of the loom to the cable. No. 1013—25 tt. List Price \$2.75 ea. No. 1014—50 ft. List Price 5.25 ea. No. 1015—100 ft. List Price 10.00 ea.

PERFORATED HANGER STRAPPING



Can be used and adapted for mounting Antenna Masts to various odd shaped objects; chimneys, towers, etc. Made of $\frac{1}{3}$ x .023 galvanized steap. Tough int flexible.

No. Standard Package List Price 7032—12 ft. coil. .25. \$0.75 ca. 7033—100 ft. coil. 8 .5.50 ca.



TELE-RAY FILTERS FOR BETTER TELEVISION IMAGE VIEWING

Outstanding Features:

- Scientifically compounded, optically perfected filtering for all
- Engineered to give a stereoscopic, life-like effect to the Television
- Instantly and easily attached by special adhesive.

 Picture Contrast increased by elimination of unwanted light —
 softens grays sharpens blacks.
- Image becomes sharp and clear with increased detail in room illumination.
- Glare from screen eliminated with resulting restfulness to eyes.
- Glare from screen eliminated with resulting restfulness to eyes. Unbreakable.

 Bevelled edges (Super Quality).

 Both gauges have the correct rigidity for your viewing pleasure and are guaranteed not to bend or buckle under the most extreme operating conditions.

 Not to be confused with any cheap imitations of these quality-engineered products.

 Works on all Television sets.

 Individually packed with simple instructions.

	Deluxe FILTER—40 gauge	Super Quality TELE-RAY FILTER—80 gauge
7052—10" to 7053—12" to 7054—15" to	List Price ube size Each \$1.50 ube size Each 2.00 ube size Each 3.25 ube size Each 5.50 ube size Each 8.00	(Beveled Edges) No. 7056—7" tube size Each \$3.25 7057—10" tube size Each 4.25 7058—12" tube size Each 7.00 7059—15" tube size Each 8.50 7060—20" tube size Each 14.50



DRIVE RING

Can be used for securing guy wire. Made of steel galvanized. When hammered in at an angle will remain secure under any condition.

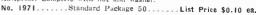
No. Standard Package 1016 \$0.10 ea.



BRIDLE RING

Ruggedly constructed. Will stand up under maximum strain. Made of galvanized steel. No. Standard Package List Price 7037 Li00 St.10 ea.







INSULATED WIRING NAILS
Perfected for twin lead indoors. The minimum of metal, in the head and wide fibreboard giving firm support to plastic band creates an extremely low capacity effect which does not interfere with TV reception. Fully insulated. Standard package 100 to a box (1000 to a carton). a carton). No. T42-White or Brown....

..... List Price \$7.50 per M



Birnbach TV-FM ANTENNA ACCESSORIES

LEADIN STRIPS



Covered weather-		heavy	cotton	braid,
No.	-	Std.	Pkg.	t Price Each
611—B	ack 12".		50	. \$0.11

Screw Terminal Leadin Strip



Locks the wire together with the strip In a secure connection assuring perfect contact. Has weather-proof over a copper strip with plated terminals. Available in white

No.	Std. Pkg. Each
617-Leadin Strip	50\$0.17
2617-Doublet Leadin	Strip 2535

COPPER STRAP CLAMP



Will take %" to 2" Pipe No. 600-Std. pkg. 50. Ea. \$0.10 List

ADJUSTABLE FLEXIBLE PIPE CLAMP

This outstanding adjustable pipe clamp distanding all masts and poles from 3/" to largest size pipe. This clamp, when placed under the Birnbach free floating guy ring provides an excellent anchor for attaching guy wires.



No. 627-Std. pkg. 50. Ea. \$0.25 List

SADDLE GROUND CLAMPS

These ground clamps have a hard pointed screw which digs through rust and makes a positive contact. Fits a 3/8" to 2" pipe.



List Price Std. Pkg. 625-Heavy Saddle Clamp. 50 . . \$0.20

FLOATING GUY WIRE RING

This free floating ring fits 1", 1 1/8", 11/4" O.D. Masts and telescopes easily over smaller upper mast, and rests on shoulder of mast section.



7034-Stnd. Pkg, 100...List \$0.25

MAST Standoff ASSEMBLY

For fast mounting of twin lead. Lead slips easily into sturdy in-sulated insert. This assembly will fit around all size masts from %" to 2" pipes, Standard package 50.



No. 628 Ea. \$0.40 List Price | No. 968

GLASS INSULATORS



Made of crystal clear glass and have a smooth surface which prevents dirt or ice

List collect Pkge, Price -3".....100..C \$8.00 00-

PORCELAIN INSULATORS AND NAIL-IT KNOBS





Std. Pkge. List Price Insulators -Brown or White..100..C \$8.75 -Glazed Nail-It Knobs 100 . . C 7.50

GROUND RODS

No.							P	Std.		List Price
616—4 818—6	Ft.			,	4			$\frac{12}{12}$.	.ea.	\$1.50
		ď	Ċ	ľ	•	•	•			

AIRPLANE SPRINGS



This rustproof steel spring cadminm-plated throughout provides a compact compression spring for taking up slack in the guy due to any great pull of strain on antenna during a heavy storm No. 764. Std. Pkg. 100. Ea. \$0.33 List

AERIAL SPRING ADJUSTER



Prevents swinging and swaying of antennas. Consists of two hooks with porcelain rings interconnecting with a powerful compression spring. Cadmium-

No. 765 Ea. \$0.90 List Price

PORCELAIN TUBES



¾" Dia. Hole.

NO.	Std. Pkge,					List Price								
42 —2"			,			1	00	ï					. C	\$5.00
43— 3"														6.00
44—4"						1	00	ī,					. Č	7.50
466"			ı,			1	0.0				i		· Č	10.50
48—8″						1	00			٠			. C	15.00

RUBBER STANDOFF **INSULATOR**



Can be used with either RG59U type cable or ribbon type line. It is heavy, rugged, and weather-proof. Will fit all antenna masts up to 1½. Tough, resilient rubber. It will keep all cables away from poles.

SPECIFY
SIZE
DESIRED.

Standard Package 100.

TV-FM GUY WIRE KIT

A compact and complete kit. Do not allow your new television installation to be destroyed by the first windstorm. A necessary addition for successful television service. Assures a trouble-free and efficient installation with a minimum of effort and cert. Simple and semplete directions tion with a minimum of effort and cost. Simple and complete directions with each individually boxed kit. Contains 50 ft. 6 strands heavy No. 20 gny wire, 3 No. 665 screw eyes, 3 Birnbach No. 763 turnbuckles, 3 Birnbach No. 764 Springs, 6 Birnbach Vibration-proof No. 762 Clamps. Boxed

No. 226

Standard Package 24

List Price, Each \$3.40

A "Natural" for your customer's Television pleasure

GUY WIRE

Finest quality guy wire obtainable. Constructed of high tensile strength ransact quarry gay whe obtainable. Constitueed of high tensile stelength galvanized steel stranded twisted wire. Ideal for guying up television transmitter, receiver masts and poles. Made of 6 strands No. 20. Fully weather-proofed. A real necessity for television installers.



	450	lbs.	Tensile	Strength.		
No.					List	Price
	25 ft				Each	\$0.44
20-	50 ft	. coil				
221	100 ft	. coil				
220			ol		Each	8.38
12201	.000 ft	. spo	ol		Each	16.75

GUY WIRE

This low priced guy wire can be used on short runs and where maximum tensile strength is not required. It has 4 strands of No. 20 high tensile twisted steel galvanized wire. Fully weather-proofed.



225 lbs. Tensile Strength. List Price No. 20A Each \$0.65 50 ft. 221A— 100 ft. 220A— 500 ft. Each Each 1.25 6.25 1220A-1000 ft. Each 12.00

DOUBLET LIGHTNING ARRESTERS



This Arrester is of the air gap type which is the accepted means of protecting doublet antennas from lightning. Installation instructions are printed on the box.

No. 2650—Doublet Lightning Arrester Stid. Pkg. 25....List \$0.50

RADIO LIGHTNING ARRESTER No. 2650-Std. Pkg. 50.Ea. \$0.56 List

INSULATED STANDOFFS

TWIN LEAD TYPE

This insulated twin lead standoff is quality engineered and is constructed of low loss insulating material.

These sturdy insulators are slotted to take the 300-ohm ribbon type line and are solidly held by the eve the cadmium-plated steel screws. The No. 1965—3" machine screw twin the standoff is designed for mounting directly on a metal mast—uses a /32 thread.

lead standoff 10/32 thread. List Price Νn Standard Package Each \$0.10 Each .15 Each .15 Each .25 1963— 3" 1965— 3" M.S. 1964— 7" 1967—12" 100..... 100.

		_		
SCREW	EYES	_	BAKELITE	EYES





TURNBUCKLES

Constructed of rustproofed galvanized steel. Used to take up any slack in guy wire. Convenient, durable, dependable,

..... Each \$0.27 List Price No. 763 Standard Package 100 ...

Birnbach HOOK-UP WIRE



SPECIAL	SPOOL	ASSORTMENT	\$1.10	LIST PDI	CE
		WOO OW I WIE IA I	31.10	LISI PKI	C: F

No.	Ft.	Size	-		2.5.	I KICE	
				No.	Ft.	Size	*
3000	65	22	Solid Pushback	3013	20	0120	Туре
			Solid Pushback	3013	· · · · · · · · · · · · · · · · · · ·		Solid Leadin
				3014	65	18	Stranded Leadin
3002	45	18	Solid Pushback	3015	95	10	Stranded Leadin
3003	35	16	Solid Pushback	2010		18	Stranded Lacquered
3004	20	***	Solid Pushback	3016		Brown &	White AC-DC Wire
3004		14	Solid Pushback	3017	30		Kinkless Wire
3005			. Strandad Pushback	3010	00		Kinkless Wire
			Stranded Pushback	3010	20	18	Twisted Lamp Cord
2007			Stranded Pushback	3019			Single Fix. Wire
3007	40	18	Stranded Pushhack	3020	9.5	10	Parallel Silk
3008	30	16	Stranded Pushback	2001			Parallel Slik
				3021		18Blk.,	Wht., Brn. Zip Cord
3009	20	14	Stranded Pushback	3022	100	18	Solid Tinned
3010	50	18	Colored Rubber	2022	7=	***	Solid Tinned
3011	25	1.0	Colored Rubber	3023		18	Bell Wire
				3024		18	Shielded Wire
3012	30	14	Stranded Leadin				Minimum Wife
_							



FREE DISPLAY

One Display is given with each initial order for 100 spools. Each Display made of strong, re-inforced steel, mahogany crackle finish with attractive 3 color Display at top. Space provided to indicate YOUR resale price.

EXTRA DISPLAY RACKS AVAILABLE AT \$3.25 EACH, NET

Height - 24" Width - 1216"



COLORS: Black Rlack Gray Brown White Blue Dk. Blue Yellow Purnla Green Tan

Note: For 25.000 feet of on color, deduct 10% of List Prices above.

Thermoplastic Synthetic Insulated Radio and Electronic Hook-up Wire (Fungus Proof) SPECIFICATION JAN - C - 76 *

Type SRIR-1000 Valt

Approx. AWG Cat. No.	Navy Standard Conductor Designation	Conductor Construction	Nom. Wali	Max. O.D.	List Price Per M Ft,
7024—24 Stranded 7000—22 Solid 7001—22 Stranded 7002—20 Solid 7003—20 Stranded 7004—18 Solid 7005—18 Stranded 7007—16 Stranded 7009—14 Stranded 7011—12 Stranded	$\begin{array}{cccc} & (16) \\ 3/5 & (1) \\ 3/5 & (7) \\ 1 & (10) \\ 1\frac{1}{2} & (11) \\ 1\frac{1}{2} & (16) \\ 2\frac{1}{2} & (26) \\ 4 & (41) \\ 6 & (65) \\ \end{array}$	16 wires .005" .0253 solid 7 wires .010 .032 solid 10 wires .010 .0403 solid 16 wires .010 26 wires .010 41 wires .010 65 wires .010	.012" .015" .015" .015" .015" .015" .015" .018"	.052" .062" .066" .068" .074" .076" .083" .096" .120" .140"	\$16.50 12.50 16.00 15.00 19.50 19.00 22.50 37.50 55.00

The above items meet all requirements of Army-Navy joint specification JAN-C-76, Type Skilk for plain resin construction where highest resistance to fungue growth is required.

SPECIFICATIONS FOR THE JAN-C-76

I-Electrical Properties:

A—Dielectric strength
B—Insulation resistance
C—Creepage resistance

II-Mechanical Properties:

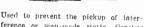
A—Low temperature flexibility
B—High temperature stability
C—Resistance to heat deformation
D—Abrasion resistance
E—Low moisture absorption

III-Chemical and Other Properties: A—Resistance to common solvents

B—Flame resistance

C—Fungus resistance

SHIELDED LEAD-IN WIRE



ference or man-made static. Consists of a stranded tinned copper conductor with a wall of live rubber over which a tinned copper braid is woven

No. 20-1/64"

	Cap.							
	mmfd.	List						
No. Ft.	per Ft. O.D	$\Gamma^{-1}r_{3}$						
810-500 Spool	.105090	25.00						

No. 18-1/64"

807- 25 Coil .	125	.100 \$	1.30
809-100 Spool	.125	.100.,	5.00
803-250 Spool	.125	.100	12.50

No. 16-1/32"

825 25	Coil .	90	.145.	. \$	1.75
851-100	Spool	90	.145.		6.50
802-250					

No. 14-3/64"

804 25	Coil .	95	.185.	\$ 2.25
806-100	Spool	95	.185.	8.50
801-250	Spool	95	.185.	22.50

RADEX SLIPBACK HOOKUP WIRES

It has a covering of rubber over a cotton wrap and is then covered with a bright color cotton braid and dipped into paratin. This construction will not cause the cotton insulation to fray or bunch up when pushed back. It has a high dielectric strength and will withstand all climate changes without breakdown.

25 FT. COILS

Solid | Stranded | Solid | Solid | Stranded | Solid | Stranded | Solid | Stranded | Solid | Stranded | Solid | Solid | Stranded | Solid |



BIRNBACH

20110	Stranded	Solid	Stranded	Solid	Stranded
Size No. List Price 20 280 \$0.56 18 282 .63 16 284 .77 14 286 1.05 12 288 1.61	No. Prices 281. \$0.63 28370 28584 287. 1.26 289. 1.75	List No. Price 380.\$2.25 382. 2.50 384. 3.10 386. 4.20 388. 6.50	No. Pric 381.\$2.50 383. 2.80 385. 3.40 387. 5.00		No. Price 481.\$12.60 483. 14.00 485. 17.00 487. 22.50
1000 FT. SPO(Solid	Stranded	No. 20	2000	NCTURE VO	2100
Size No. Price 20 580 \$21.00 /	No. Price		No. 12	No. 14 2200	
20 580\$21.00 5 18 582 24.50 5 16 584 28.00 5	583. 26.00		60 Cyc	UNCTURE le A.C.	
14 586 35.00 5 12 588 63.00 5 COLORS—Black, Red, Bl	87. 39.50 89. 70.00	No. 18	2200	No. 14 No. 12	2200

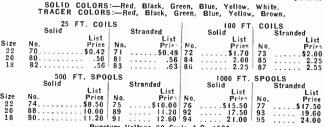
BIRNTEX SLIPBACK WIRE

This wire is constructed of quality materials and carefully insulated with a cotton wrap over which a cotton braid is closely woven, and then saturated with parafin.

SOLIO COLORS:—Red. Black, Green, Blue, Yellow, White.

TRACER COLORS:—Red. Black, Green, Blue, Yellow, Brown.

Puncture Voltage 60 Cycle A.C. 1500





CABLE and Birnbach TRANSMISSION LI COAXIAL CABLE

PA and COMMUNICATING SYSTEM CABLES



Pair

Constructed of solid enameled wire with a cotton wrap color coded cotton braid twisted pair waxed, and bare copper braid woven overall.

No.	Size	0.D.	List Price
821-100 Ft.	2 2	.125	\$ 6.75
822-500 Ft.	22	.125	32.00
823-100 Ft.	19	.145	8.00
	19		



Armored Speaker Cable

Constructed of 2 No. 18
stranded parallel conductors in rubber color coded cotton braid waxed, paper wrap and closely armored.

No.		Size	0.D.	List Price
1110 100	Ft.	184	.155 x .26	0"\$10.00
1111 250	Ft.	184	.155 x .26	0" 2 0 .00
1112 500	Ft.	$18^{\frac{1}{64}}$.155 x .26	0" 40.00
11131000	Ft.	181	.155 x .26	0" 80.00

Rubber Shielded Microphone Cable



Consists of individual flexible tinned copper conductors, each insulated with a heavy wall of colored rubber for easy lidentification. A 1-32 wall of tough rubber is placed overall. It is a weatherproof cable, ideal for outdoor use, and will withstand hard and rough usage.

				Cap. bet. Shield &	Ca k be		
No.	Cond	o. Is. Ft.	Size	Cond. mmfds.	Con	ds. Ids. O.C	List Price
772	2	100	20	55	31	.270	\$15.00
1772	2	250	20	55	31	.270	35.00
773	2	100	20	58	33	.305	19.50
1773	3	250	20	58	33	.305	48.75
774	4	100	20	48	28	.345	22.50
1774	4	250	20	48	28	.345	59.75
775	5	100	20	51	29	.395	27.50
1775	5	250	20	51	29	.395	68.75
776	6	100	20	45	27	.405	32.00
1776	6	250	20	45	27	.405	80.00
777	7	100	20	49	27	.420	35.00
1777	7	250	20	49	27	.420	87.50
-					_		



RUBBER S. J. CABLE

Consists of individual flexible tinned copper conductors, care insurance of colored rubber for easy identification. A 1/32 wall of tough polished rubber is placed overall. It is a weatherproof cable, ideal for outdoor use, and will withstand hard and rough usage.

Cat.	No. Conds.	Ft. on Spool	0.D.	List Price
788	2	100	.250	\$12.00
789	2	250	.250	28.25
790	3	100	.300	15.25
791	3	250	.300	35.00
792	4	100	.325	19.50
793	4	250	.325	45.00
794	5	100	.370	24.00
796	6	100	.400	30.00
797	6	250	.400	70.00
798	7	100	,400	35.00
749	8	100	.460	40.00

FM and TELEVISION TWIN LEAD 300 OHM TRANSMISSION WIRE



Has full thickness insulation throughout Polyethylene insulation resists ofl, acids and abrasions. Minimizes the effects of attenuation. Reduces distortion.

R.M.A. STANDARU
Conductors, Bare Copper. 7/No. 28 AWG Insulating Material Polyethylene Weight per 1000 ft. 14.1 lbs.
Attenuation in Decibels per 100 ft.:
50 MC
No. 7028— 50 ft. coils List Price \$2.25 ea. No. 7029— 100 ft. coils List Price 4.50 ea. No. 7030—1000 ft. spools List Price 40.00 ea.

50-ft, and 100-ft, coils individually boxed

COPPERWELD ANTENNA WIRE (STRETCHLESS)



	LIST PF	RICES	
Feet	No. 10	No. i2	No. 14
100	\$ 4.50	\$ 3.15	\$ 1.90
250	11.25	7.75	5.25
500	22.50	15.50	10.25
1000	43.75	30.50	20.00 49.50
2500	108.00	76.00	49.00

					٦	ı	Ξ	N	S	ı	L	Ŀ		S	1	ŀ	8 1	Ł	N	Ŀ	ij		н					
No.	10																									,	1130	lbs.
No.	12																										720	IDS.
No.	14																		÷								400	lbs.
SPE	CIA	L	Ι	J	E)	N	G	7	I	I	S		A	ľ	7.	A	1	L	A	Ι	31	1	E	C	1	١	ORI	DER



Crystal Microphone Cable

For use with crystal and ribbon microphones. They are designed for the stranded conductor with a wall of low capacity rubber and closely woven shield and tough rubber wall overall.

			per Ft.		List
No.	Ft.	Size	mmfds.	0.D.	Price
872	100 Crystal	20	37	.270	\$12.00
1872	250 ('hystal	20	37	.270	28.50
870	100 Lapel	20	60	.175	9.00
1870	250 Lapel	20	60	.175	22.50
871	100 Lapel	20	50	.155	9.00
1871	250 Lapel	20	50	.155	22.50



Shielded

Battery Cable
Constructed of flexible
stranded conductors covered with quality rubber compound and
breided with cotton, color coded, A tinned copper
shield is woven overall. Used to prevent intershield is woven overall. Used ference from being picked up.

No.	No. Conds.	Ft.	Size	Cap. bet. Shield & Cond. mmfds.	Cap. bet. Conds, mmfds.	0.D.	List Price
972	2	100	20	76	61	.205	\$9.50
973	3	100	20	90	50	.210	11.00
974	4	100	20	62	35	.285	14.00
975	5	100	20	6.4	43	.290	17.00
976	6	100	20	95	48	.300	20.00
977	7	100	20	87	41	.340	25.00
978	8	100	20	103	61	.345	29.00
979	9	100	20	100	57	.360	32.50
980	10	100	20	107	80	.375	37.00

HEAVY DUTY S. J. CABLE

					List
Cat.	No. Conds.	Ft.	Gauge	0.D.	Price each
574	2	500	No. 18	.300	\$45.00 54.00
578	2	500	No. 16	.325	34.00

73 OHM COAXIAL CABLE RG-59/U

Constructed of No. 22 solid plain copperweld with 146 O.D. Dielectric insulation, then with copper inner shield and Black Vinyl jacket. Overall O.D. is .242. Nominal impedance 73 ohms. Nominal capacitance 21 mmf. per ft. Permits peak receiver performance without distortion. Meets all requirements for Television and FM range.

Attenuation	(Mc)	10	30	100	300	400
DB per 100	řt	1.0	2.0	3.8	7.0	7.9
No.					List	Price
907—100 f	t. Spool				\$]	15.00
908-250 f	t. Spool					36.00
909 500 f	t. Spool				7	70.00
970-1000	ft. Reel.				13	37.50

SHIELDED TRANSMISSION CABLE



Twisted, shielded 2 cond, 72-ohn transision cable. Weath-terference, A matching stub is recommended with strands, shielded.

List Price \$10.50 ea...List Price \$10.50 ca...List Price 87.50 ea. No. 1978— 100 ft.... No. 1978— 100 ft.... No. 1980—1000 ft.... Commercial Type Twisted Pair

(No. 18 STRANDED) (No. 18 STRANDED)

This cable is used extensively as original equipment of master antenna systems. It is constructed of 2 constructed of 2 a special grade of rubher color coded and covered with a white weatherproof cotton braid.

DR

No. Ft.	List Price	Freq.	Surge Imp. (Ohms)	Loss per 100'
916— 50 Spool 917— 100 Spool 918— 250 Spool 919— 500 Spool 920—1000 Spool	6.00 12.00 23.75	10 Mes 20 Mes 40 Mes	82.5.	3.9



BATTERY CABLE

Constructed of individual rubber insulated stranded conductors, cotton braided and color coded. A closely woren cotton braid overalt.

No.	No. Conds.	Ft	Size	O.D.	List Price
172	2	100	20	.200	\$6.0 0
173	3	100	20	.205	8.00
174	4	100	20	.260	10.00
175	5	100	20	.300	12.00
176	6	100	20	.320	14.50
177	7	100	20	.340	17.50
178	8	100		.370	20.50
179	9	100	20	.400	23.00
180	10	100	20	.410	25.00
182	12	100	20	.430	30.00
	All Cab	les	Available in	Special Leng	iths



Shielded Battery Cable (Cotton Braid Overall)

Constructed of individual tinned stranded copper with a wall of rubber and covered with a colored cotton braid.

Cap.
bet. Cap.

No.	No. Conds.	Ft.	Size	Shield & Cond. mmfds.	bet. Conds. mmfds.	0.D.	List Price
972 973 974 975 976 977	3 4 5 6	100 100 100 100 100 100	20 20 20 20 20 20 20	120 86 103 73 70 68	65 49 46 38 36 35	.215 .240 .295 .312 .330 .350	\$10.50 15.00 18.00 21.00 25.00 28.00



Diathermy Cable

Specially designed for use with electrotherapy apparatus. It is extremely flexible with a stand the exacting service requires.

ı	ĺ	Bi	eakrown Voltag	le .	List
ı	No. 756 757	Ft.	60 Cycles A.C.	0.D.	Price
ł	756	100 Spool	20,000	.300	\$ 14.00
J	757	1000 Reel	20.000	.300	126.00

BIRACO TUBING Birnbach DIAL and MAGNET WIRE





DIAL CABLE 42 Strand **Phosphor Cable**

Constructed of the finest phosphor bronze wire over a linen thread cen-ter. Due to its high ten-sile strength, it will not stretch.

No. 1025— 25' Spool List Price \$1.20 each No. 1050— 50' Spool List Price 2.25 cach No. 1051— 100' Spool List Price 4.00 each No. 1052—1000' Spool List Price 33.00 each No. 1052—1000' Spool List Price 33.00 each

Phosphor Bronze (Light Cable)
A lower quality cable than No. 1025, but a cable that will give good service. This is a braited Phosphor Bronze cable.
No. 1053— 25' Spool List Price \$0.66 each No. 1054— 50' Spool List Price | 1.25 each No. 1055—100' Spool List Price | 2.55 each No. 1056—1000' Spool List Price | 18.50 each No. 1056—1000' Spool List Price | 18.50 each No. 1056—1000' Spool List Price | 18.50 each

Extra Heavy Linen Dial Cable
Made of the finest linen for replacement on
all receivers, same as used for Phileo. It
is extra heavy for exceptional long service.
No. 1057— 25' Spool List Price \$1.30 each
No. 1058— 50' Spool List Price 2.50 each
No. 1059— 100' Spool List Price 4.50 each
No. 1050—1000' Spool List Price 36.00 each

Heavy Linen Cable

This braided cable is used for replacement for all Phileo Receivers.
No. 2025 - 25' Spool List Price \$1.30 each No. 2050 - 50' Spool List Price 2.50 each No. 2051 - 100' Spool List Price 4.50 each No. 2052-1000' Spool List Price 36.00 each

Light Linen Dial Cable (Silk Core)

High quality linen cable used on many re-ceivers specially treated to prevent slipping, No. 3025— 25' Spool List Price § 1.20 cach No. 3050— 50' Spool List Price 2.25 cach No. 3051— 100' Spool List Price 2.25 cach No. 3052—1000' Spool List Price 2.5.00 cach

Extra Light Linen Cable

It is a strong extra thin linen cable for re-placement, Braided of the finest black linen. No. 4025- 25' Spool List Price 50.75 each No. 4050- 50' Spool List Price 1.40 each No. 4051- 100' Spool List Price 2.50 each No. 4052-1000' Spool List Price 18.50 each



SPRING WIRE CLIPS

They will hold a wire, up to No. 10 B&S Gauge, in a secure contact. All clips are brass nickel-plated. List Price th Std. Pkg. Per C

No. Length Std. Pkg. Per C 32—Spring Clip 1"100...\$2.00 33—Twin Clip .1%"...100... 8.50

ALL RUBBER LAMP CORD

This cord is an all rubber covered insulated parallel cord which can be separated by starting with a knife. Connects easily and cannot fray. Sanitary and neat.

COL	ORS: Black	White,	Brown
572 - 250	Spoot	18	\$ 4.25 10.00 20.00

BUS BAR WIRE

Used to hook up all types of transmitters, especially ultra short wave equipment. Made of hard drawn copper, tinned, straightened, and cut 2 ft. lengths.

	List Price
No.	per 100 lengths
2010-No. 10 Round	
2012-No. 12 Square	
2013—No. 12 Round	
2014-No. 14 Square	
2015—No. 14 Round	Tinned 4.30

MAGNET WIRE

Special Spools - \$0.56 List Price

On attractive speeds, even sizes from 14 to 40 inclusive, in Double Cotton, Piain Enamel, and Double Silk, Here is a really sensational seller for the dealer who will put this display on the counter. It is a Silent Salesman which will bring you real profit the year around! FREE DISPLAY! One Display is given with each initial order for 100 spools. Each Display made of strong, re-inforce steel, mahogany crackle finish with attractive 3 color Display at top. Space provided to indicate YOUR resale price.

Extra Display Racks available at \$3.50 each, Net. LENGTH OF WIRE OF SPECIAL SPOOL

Size	Plain	Daniel.									
			Double 1		Plain	Double	Double i	Size	Plain 1	Double	Double
B&S	Enamel	Cotton	Silk	B&S E	Enamel	Cotton	CIII.	D 0 0 -			
12	15 ft	9 ft	ft [22 1	110 ft	75 ##	27 64	20 0	7	00.0	Silk
14	26 ft	90 61	11 6	24	104 6	07 6	37 11.	34 0	49 ItI	80 ft	124 ft.
16	24 64	24 6		24	104 11	9/ It	56 It.	34 9	00 ft1	95 ft	131 ft.
20	86 ft	56 ft	. 29 ft. [30.	595 ft	158 61	119 6	40	-0 4	10 11	110 11.
						100 16	TTO 11. 6	1 7019	JU 112	ю п	120 ft.

1/4 LB., 1/2 LB., 1 LB., MAGNET WIRE—Approximate Feet and List Prices

	S I	LI. /					Plain Enamel												
						te)	1		Pic	ıın E	nam	el		I D	ouble	Sill	(G	reen	1
	/4 fb	Speet	1/2 tb	Spool	f fb	Spool	1	t/a th	Spool				Spool	17.11	Spool		Spool		
Si	ze	List		List		List	Si		List	/2	List	1 10	List	Size		72 10		110	Spool
8.8	S ft.	Price	ft.	Price	ft.	Price			Price	ft.		**			List		List		List
12		\$0.40		\$0.70		\$1.27					Price		Price		t. Price		Price	ft.	Price
14	iõ						!2		\$0.33		\$0.63		80.12		2 \$0.57	24	\$1.12	49	\$2.12
			39	-71	. 78		[4	20	.35	40	.65	80	1.10	14 1	9 .60	39	1.15	78	
16	31	-44	62	.73			16	32	.36	63	.66	126	1.12	16 3			1.25	125	
81	48	.45	97	.81	194	1.37	81	50	.37	100	.67	201	1.16	18 4	9 .72		1.31	198	
20	78	.49	157	.90	304	1.54	20	80	.40	160	.68	320			8 .83		1.62		
22	119	.55	238	1.02	477	1.75	22	127	.41	254	.72	508		22 12				314	
24	134	.64	269	1.21	738		24	201	.43	403	.77	806		24 19				495	
26	284	.77	568	1.44	1136		26	320										781	4.00
28	435	.91	871	1.75					.52	640	.92	1280				606	2.50	1212	4.90
30	641						28	507	.55	1015	.97	2030		28 47		956	18.2	1912	5.31
		1.09	1284	2.06	2596		30	805	.60	1610	1.10	3220		30 73	9 1.62	1479	3.12	2958	6.25
32	976	1.35	1953	2.55	3906			1282	.66	2564	1.18	5128	2.18	32 113	6 2.18	2272	4.25	4545	
	1365	1.90	2735	3.60	5470	6.80	34	2037	.75	4075	1.36	8150	2.73	34 171		3424	5.50		10.60
	1827	2.60	3654	4.98	7309	9.35	36	3221	.87	6442		12887	2.98	36 255		5102		10204	
38	2738	5.00	5476	9.35	10952	17.50		5132		10246		20492		38 377					
40	3405	7.50				26.00	I AN	8143		16286		32573		40 504		10000	11.85	15082	22.50
_			0011		10020	40.00	70	0140	1,30	10200	4.//	02013	0.20	40 904	v v.35	10080	17.75	20161	33.50

BIRACO TUBING (Extruded)



It is a extruded tubing made of the new synthetic plastic material. Extremely flexible and when stretched returns to its original form. Withstands the effects of heat and will not support combustion. Will only soften at 300°F and will not flow at 425°F. Its dielectric strength:—750 volts per mil. when dry and 350 volts when wet. It is not affected by oil and is resistant to most coal tar solvents and petroleum solvents. Resists acids, alkalles in concentrations up to 30% by weight, Available in continuous lengths. Dielectric strength—10,000 volts.

COLORS: Black, Red, Green, White and Yellow

No. Size I.D. per 36" fen 313	
313	. 17
314	. i ż
315	
316	-18
317	. 19
317	.19
318	.50
319 4	.55
320 2 263	.60
321 5/16 3125	
200	.70
	.75
323	.2٠
324 5/8	.3.

SERVICE CORDS



Constructed of all rubber Underwriters Approved lamp cord and plug on one end and with the other end stripped and tinned all ready for use.

COLORS: Black or Brown

VARNISHED TUBING

Provides quality insulation for wires used on radio sets, small cleerical equipment and instruments. The outside is impervious to oil, acid and water. It is highly flexible and will not crack after aging. Average dielectric strength 5000 volts.

COLORS: Black, Red, Green, White and Yellow

		List Price				List Price
	I.D.	per 36" lengths	No.	Size	1.D.	per 30" lengths
Ų	034	\$0.17	291	20	034	\$0.17
8	042		293	18		
6			204	10	0-0	
			205	10		
			200	••••• 14 ••••		
č			300	12	085	
•			301	8	133	50
ŧ			297	3/16	208	E0.
2			29R	1/4	263	
16		žŏ	303	5/1e	2105	••••••
,	375		304	0/10		
•	500		000	78		
,		1.2.	299			1.50
3		1.3	296		625	1.50

BIRACO & VARNISHED TUBING IN HANDY PACKAGES

Both BIRACO Extruded TUBING and VARNISHED TUBING are also available on convenient paper spools in a variety of lengths to meet practically every demand Put up in handy packages to fill the requirements of servicemen and manufacturers. Wilde assortment of colors

mide i	resortment of	colors.							
1	BI	RACO TU	BING		1	VAR	NISHED T	URING	
Cat.	Gauge	Approx.	Length	List Price	Cat.	Gauge	Approx.	Length	
No.	Size	1. D.	Package	Package		Size	I D		List Price
2142						0.120	1. 0.	rackage	Package
3148	18	042		\$0.75	∥293 V	18	042	25 ft.	\$ 1.50
3130.			<u>2</u> 0 H	/ 5	∥294V	16	053	25 ft.	150
3168	14	066			295V	14		. 25 ft	1.50
317B.,	12	085			300V	12	085	25 61	1.50
325B	10	106	15 ft		307V	10	108	20 %	1.50
318B	8	.135.	15 ft	75	3010	8	125	15 64	1.30
326B	6	166	15. 61	75	3037	6	100	13 It	
319B	4	200	10 4	75	302 4		100	10 It	
2200	2	000	10 6		305V	4	208	10 ft	1.50
					306V	2	263	10 ft	1.50
31486.	18		IQU IC	2.75	293VC.	18	042	100 ft	5.25
315BC	16	053	100 ft	2.75	294VC.	16	053	100 ft	5.25
316BC	14	066	100 ft. · .	2.75	295VC.	14	066	100 ft .	5.25
317BC -	12	085	100 ft	2,75	300 VC.	12	085	100 ft	5.25
325BC.	10	106	100 ft	4.40	307VC	10	106	100 6	
318BC .	8	135	100 ft	4 40	30 LVC	8	135	100 **	9.00
326RC.	6	166	100 ft	4 40	30270	· · · · · · · · · · · · · · · · · · ·	100	100 11	9.00
	4				302 40.	6	166	100 ft	9.00
32080	2	969	100 4	0.78	300 VC.	4	208	100 f t	15.00
320BG		203	IUU It	0.73	306 VG.	2	263	100 ft	15.00



Birnbach

TEST LEADS and **ACCESSORIES**

High Voltage



Test Leads

The high dielectric strength and low leakage resistance of these test leads recommend them for for tosting high voltage high sensitivity devices such as Meggers and Megohneters. They are particularly well sulted for use in testing breakdown voltages up to 1200 volts. The prods and the tip handles are made of black and red bakelite with special designed tips for application. The prods are 6" long and ½" dia. and have a guard ring near the metal tip to prevent accidental touching of the exposed metal part. Extra heavy kinkless test lead wire 7/32" dia. is used throughout, The leads are 60" long.

No.

List Price
-High Voltage Test Leads \$5.00

DeLuxe Test Leads



-Solderless prod test leads . \$1.75 -Needlepoint prod test leads 1.75

Bakelite Pencil Type Test Leads



List Price

Bakelite Peneil Type Test

Lead\$2.50 -Bakelite Pencil Type Test
Lead
-Necdlepoint Prod Tip for
Replacement

Test Leads (Bakelite Handles)

(Bakelife Hand
I are 4" red and black
insulated handles. Needles
can be replaced when
broken simply by loosening the knurled collar.
Available with either
phone tips or spade lugs.
Length overall 50".
No. List Price
420—Phone Tip Test
Leads ...\$1.12½
421—Spade Lug Test



S-34

Leads ... \$1.12½

4421—Spado Lug Test
Leads ... 1.12½

Standard Test Leads
Same as above with a Sr. solderless

-Phone Tip Test Leads....\$1.00 -Space Lug Test Leads.... 1.00

Insulated Solderless Phone



Insulated handles so the name of the name

No.
409—14" Long ... each \$0.20

Tip—2 14" Long ... each \$0.20

415—Insulated Jr. Solderless
Tip—1 15" Long ... each .18 List Price

Insulated

Phone Tip BIONBACH



Phone Tip

Ideal for replacement on headset, speaker and extension cords.

No. 402—Std. Pkg. 100
List Price \$2.25 per C

Solderless Phone Tips







No. 26 Phone Tip Jack

Milled of brass and nickel plated. The bronze springs are specially made to hold the phone tip tight and straight. Mounts in a ¼" dia. hole.

No. 26—8td. Pkg. 100.

List Price \$12.50 per C

No. 407 Insulated

Tip Jack Has a 15" insulated top and mounts in a 16" dia. hole. The specially designed bronze springs hold the phone tip tight and straight. Colors:—red. black, yellow, and green. Std. Pige, 100, 00.

407—Insulated Phone Tip Jack\$0.18



No. 411 Bakelite Pencil **Test Prods**



connection is made by threading the wire through the handle and securing to the needlepoint tip by locking the Scrulok. The tip is then screwed into the handle. Available in red or black the lonly.

List Price 411—Bakelite Pencil Test Prods. \$1.10

Solderless Tip Prod

Made of highly pol-ished east phenolic res-ished cast phenolic res-in. A solder-less phone tip is threaded at end per-mitting replacement of tip, Available in red or black. No. List Price

410.....4" Handle.....\$0.50 343.....5" Handle......50

Needlepoint Test Prod

A threaded shank needle-point chuck is threaded into the end of handle. Made of highly polished east phenolic handle. Available in red or black. No. List Price No. 344-Needlepoint Test Prod.

SCRULOK Needlepoint Test Prods

These insulated prods have the Scrulok solder-less system of wire connection. Wire is easily attached without soldering. An extra heavy needle is fitted into the tip. Colors:—black or red. No. List Price

417—Needlepoint Test Prod, 4" Handle

-Needlepoint Test Prod,
5" Handle

BIRNBACH

Headset

Phone
Cords
These cords are closely woven and are very durable and strong. They are used for replacement of worn headset cords. Standard cords are listed which will match practically all headsets manufactured. We will be glad to quote on cords having special terminal requirements.
No. ende

AC-DC Resistance Cords



Designed for replacement of the internal voltage dropping resistor on the present and older type of AC-DC sets. It consists of a line cord into which a third element has been incorporated. The voltage dropping resistor reduces the voltage to that needed for the filament of the tubes.

	Sets	List
Cord	Having	Price
No. Rating Fo	ollowing Tubes	Each
35135 ohm	2575-43-4*	. \$1.15
36160 ohm	2575-43-3*	1.15
34180 ohm	1972-43-4*	
49200 ohm	0575 49 9*	
49200 bimi	1070 40 25	
37220 ohm	1225-45-5	
	12Z3-43-2*.	
	25Z5 -3*	
38290 ohm	12Z3 -3"	•
45300 ohm .		. 1.15
39330 ohm	4*	. 1.15
	12Z3 -2*.	
40350 ohm	12Z3 -1*	1.15
47390 ohm	-3*.	1.15
47390 ohm	-2*.	1.15
125220-110 Va	olt Voltage	
reducii	ng cord	2.25
126280 ohm		
127190 ohm		
128165 ohm		
* 6.3 volt tubes.		
0.5 voit tubes.	1 I of Lineraus	a state.

BIRNBACIN

Speaker Extension Cords

Constructed of stranded annealed copper wire insulated with rubber over which a brown mercerized cotton braid is closely woren. Complete with easily attached bakelite connector.

No. List	Price
166- 10 ft. Cordeach	\$1.50
120- 50 ft. Cordeach	2.00
121- 30 ft. Cordeach	2.75
122- 40 ft. Cordeach	3.10
123- 50 ft. Cordeach	3.50
124-100 ft. Cordeach	6.50
151-Bakelite Extension Cord.	
Connector only each	.60

Alligator

Clips

Made of steel nickel plated. The jaws match accurately permitting them to grip all kinds of wire securely. The insulated handle is \$%" dia. and %" long end comes in red or black.

No.	Lei	ıgth	Std. Pkg.	List Price
31-Alligator	elip	2".	50	.\$0.09
310—Insulated	olin	9 1/.	" 50	23

Kinkless Test Lead Wire

Abrasion resisting live rubber that will not kink or break down in service. No. 20 has 41 strands and No. 18 has 66 strands of No. 36 tinned annealed copper wire. Puncture



No.	Ft.	Price	Size	Rubber Wall Thicknesses	Voltage 60 Cycle A.C.	0.D.
00 1 0	25 100	\$0.75 3.75	$20\frac{3}{64}$	0.45	12,000	.140
62 64	500 25	17.00 1.35	$18\tfrac{3}{64}$.045	12,000	.155
66 67	100 5 0 0	4.55 21.00 11GH	VOLT/	GE TEST L	EAD WIRE	
63	25	\$2.60	$18\frac{5}{64}$.076	16,500	.218
68 69	100 500	7.00 .42	CO	LORS:—Red	and Black.	



The teeth mesh correctly permitting good contact to be made. The No. 27-S is a solid copper clip with a brass screw designed for high frequency work. Sturdily constructed. Standard Package 50. Jaw Price Jaw Price Loth, Spread ea

27-Pee Wee	11/2".	. 3/4".	\$0.09
201fidmet	9"	. 37,7	.09
29—Medium	2.76"	1″	.11
30—Large	4"	.1 1/4".	.20
27C-Pea Wea			
Copper	.1%".	. %".	17
278—Rubber Sleev	c		
red or black.	. .		.16

Birnbach WIRE, AUTO CABLE and ACCESSORIES



SOLID ENAMEL WIRE

MM HIGH TENSION CABLE



Useful in reducing interference from auto secondary circuits. Also used as photo electric cell leads and wherever a low loss shielded lead is required.

				LIS'	t Price
No.				Per	r 100′
7600-7	MA	High To	nsion Cable	- 4	10.00
1811	MM.	Smeraea	Secondary	wire	10.00

FORD V-8 DISTRIBUTOR SUPPRESSOR



Designed to be inserted in the distributor of Ford V-8. Unit consists of a resistor brush which replaces the regular brush.

No. 365.....List Price \$0.35

AUTO ANTENNA CONNECTOR

Permits quick connection of the auto antenna lead-



ın	to	tne	receiver.		
No 36		-Aut	Oonnectorr	ist Pric \$20.0	

FUSED ANTENNA CONNECTOR



This connector takes a standard 3 AG automobile fuse. Used in auto radio power supply cables.

	Laprij	
No.		List Price
367—Fused Connector		per C \$25.00

HIGH VOLTAGE LACQUERED WIRE

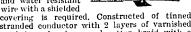


Recommended for use as leads for wiring high voltage devices, and transmitter power supplies. Constructed of timed stranded copper conductor with a wall of rubber covered with a highly lacquered cotton braid.

			Puncture		List
			Voltage		
			9500		
			9500		
			9500		
			9500		
2818-	-100	18_{32}	9500	145	. 3.50

SHIELDED VARNISHED CAMBRIC WIRE

Used where an oil and water resistant WELOW ...



wire with a shielded covering is required. Constructed of tinned stranded conductor with 2 layers of varnished cambric and a lacquered cotton braid with a tinned copper shield overall.

			Capacity pe	er	List
No.	Ft.	Size	Ft. mmfds.	. O.D.	Price
1800	100	16	142	145	.\$10.50
1818	100	18	102	131	. 9.50
1820	100	20	100	125	. 8.75
					_

SHIELDED GRID LEAD WIRE



High insulation of

of this wire will reduce the loss in shielded grid circuits.
Constructed of tinned stranded conductor with a rubber insulation, waxed cotton braid with

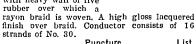
closery	16066	en smero	overan.		ļ
			Capacity per		List
No.	Ft.	Size	Ft. mmfds.	0.D.	Price
818	100	18⅓.	75	.180	\$8.50
820	100 .	$\dots 20^{\frac{1}{32}}$	70	.150	7.50

SOLID TINNED WIRE

1411—1000 ft. spool 20.00 No. 16 1412— 25 ft. coil42 1413— 50 ft. coil68 1414—100 ft. coil110 1415—1000 ft. spool 11.00	1428—½ lb. spool 1.50 1429— Î lb. spool 2.65 No. 26 1430—½ lb. spool90	290 — 50 ft. coil 1.00 490 — 100 ft. coil 1.80 490A— 150 ft. coil 2.70 490B— 200 ft. coil 3.60 1490 —1000 ft. spool. 18.00 No. 15
1409— 50 ft. coil 1.10 1410— 100 ft. coil 2.00	No. 24	No. 14 190 25 ft. coil50
1406— 100 ftcoil 3.00 1407—1000 ft. spool 28.00 No. 14 1408— 25 ft. coil 60	No. 22	492 — 100 ft. coil 2.75 492A— 150 ft. coil 4.15 492B— 200 ft. coil 5.50 1492 —1000 ft. spool. 27.50
No. 12 1404— 25 ft. coil85 1405— 50 ft. coil 1.60	1421— 50 ft. coil50 1422— 100 ft. coil100 1423—1000 ft. spool .10.00	No. 12 192 — 25 ft. coil85 292 — 50 ft. coil 1.70
No. List Price 1400— 25 ft. coil\$ 1.30 1401— 50 ft. coil 2.55 1402— 100 ft. coil 5.00 1403—1000 ft. spool 46.00	1418— 100 ft. coil 1.10 1419—1000 ft. spool 11.00 No. 20 1420— 25 ft. coil30	597— 25 ft. coil \$1.50 697— 50 ft. coil 2.50 497— 100 ft. coil 4.40 1497—1000 ft. spool44.00
SOFT DRAWN No. 10	No. 18 1416— 25 ft. coil\$0.33 1417— 50 ft. coil60	

RAYON BRAID LACQUERED WIRE

Constructed of stranded tinned copper conduc-tor for easy soldering, with heavy wall of live



		Puncture		LIST
No.	Ft.	Voltage	Size	Price
3425	25 Coil	9000	1833	\$1.00
3450	50 Coil	9000	1832	2.00
3460-	100 Coil	9000	183/2	4.00
3600	500 Spool	9000	18_{3}	18.00
Colors:	Black, red	l, green, yell	ow, brov	/n, blue

VARNISHED CAMBRIC WIRE

Widely used in automotive wiring because of oil and waterproof con-

struction.	Consists	of	tinned	strar	ıded	con
ductor wit	h two la	yers	of var	mished	l car	mbri
over which	ı a lacqu	ered	cotton	braid	is w	oven
	-		nefure			Liet

No. Ft.	Size Voltage	0.D.	Price
3416100	161000	.108	\$6.75
3418—100	181000		
3420 —100	201000(0.94	. 4.50

No. 340 WHEEL STATIC ELIMINATOR

An effective means of re-An effective means of reducing static created by the front wheels. Installation is made by placing the broad base of the spring against the hubeap and the cone point into the hole of the axle. No. 340—Std. Pkg. 50



List Price.....\$10.00 per 100

PHONO-PICKUP WIRE

Small diameter-ideally suited for replacement in pickup arms of any

No.	Ft.	Size	Price
1822A	100 ft. Spool	22	\$ 6.00
1822B	500 ft. Spool	22	28.00
1822C	1000 ft. Spool	22	52.50









BIRNBACH IGNITION FILTERS

These Ignition Filters completely eliminate Inese ignition Filters completely eliminate all ignition and high tension circuit interference, making clear auto radio reception a certainty. The only ignition filters having a copper wound inductance, which accounts for the low resistance of 120 ohms for the Ignition Filter. Less gasoline is consumed than when high registeres eliterary used. high resistance filters are used.

		List	t Price
No.			each
350—Ignition	Filter-Bracke	t Type	.\$0.85
351—Ignition	Filter—Cable	Type	85
352-Distribut	or Filter	- J F	85
353-Ignition	Filter-Screw	Type	85
359—Ignition	Filter-Slipeon	Type	. . 85
	- meet -onp-on	+ y p.c	00

BIRNBACH MASTER FILTER

Eliminates all ignition interference and does away with the necessity of having a separate filter for each spark plug. Available in two types, namely, the Distributor type for easy insertion into distributor head, and the Cable type to be placed into the distributor lead where it is impossible to the text of the cable type to be placed into the distributor lead where it is impossible to insert it into the distributor head.



List Price 354-Cable or Distributor Type.....\$3.50

AUTO NOISE FILTER



These are especially designed for the elimination of

windshield wiper, horn, and especially dome, tail, and stop light cables. Connections made by bolting down the flange of container to chassis. The long insulated lead with a convenient screw lug is connected to the source of interference. of interference.

No.			Lis	t Price
355-Auto	Noise	Filter-1/2	Mfdea.	\$0.75
356Auto	Noise	Filter— 1	Mfdea.	. 7 5



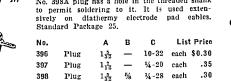
Birnbach PLUGS and JACKS



GIANT PLUGS

Used for heavy current, they are rated at 25 amps. The long life nickel silver alloy spring is secured over a pin preventing a collapse of the spring and also maintaining the full action of the spring when inserted into the jack. The No. 398A plug has a hole in the threaded shank to permit soldering to it. It is used extensively on diathermy electrode pad eables. Standard Package 25.

Duna						
No.		Α	В	C	List	Price
396	Plug	$1\frac{5}{32}$	_	10-32	each	\$0.30
397	Plug	170	_	1/4-20	cach	.35
398	Plug	$1\frac{5}{32}$	5/8	1/4-28	each	.30
398A	Plug	$1_{\frac{5}{32}}$	t _{/8}	1/4-28	each	.30





398

Large area of contact is one of the outstanding features of these jacks and plugs. The No. 400 series of packages have a nickel silver contact spring secured over a full length central pin, making these plugs non-eollapsible and assuring a low resistance contact. Capacity 5 amperes. Standard Package 100.

No.		Α	В	С	List	Price
400	Plug	3/4	1/2	6-32	each	\$0.12
401	Plug	$\frac{31}{32}$	_	6-32	each	.13
404A	Plue	3/4	3/6	14 - 28	nach	19





BANANA PLUGS

No. 403 BANANA JACK

Accurately milled and has a precision reamed hole to help maintain the tight and smooth action of the plug. It is made of brass nickel plated and comes complete with nut and lug. Standard Package 100.

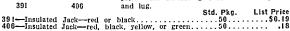
No. A B C List Price 403 Jack ½ % ½ -28 \$0.12





INSULATED BANANA JACKS

The No. 391 Jack is very popular with the electric therapeutic manufacturers. The ½" dia. Insulated head admits all of the exposed metal part of the metal plug when Inserted. Mounts in a ½" dia. hole on a panel up to ¾" thick, The No. 406 Jack has a ½" dia. hole and takes up to a ¾" panel. Both come complete with insulating shoulder washer, nut and lug.





SHAFT COUPLINGS, REDUCERS AND EXTENDERS

By the use of these units all ¼" and ¾" dia, shafts and knobs can be assembled together. The insulated units are for use where electrical isolation is desired. Furnished complete with set screws shown. Be sure to specify whether Brass or Insulated is desired.

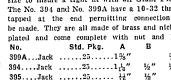
_	Brass or	Insulated is	destred.				
	Brass No.	Insulated No.	Shaft A	Hole B		List	Price
	534 535 536	634 635 636 lucer for %"	1/4" 1/4" 2/8" Dia, Hole	14" 3%" 14" to 14"		each s each each Shaft.	.16
	337—Itec	ideer for 78			.,,,,,	each	
_			COUPLIN				
1	Brass No.	Insulated No.	Shaft A	Hole B		List	Price
1	531 532 533	631 632 633	1/4 " 1/4 " 3/8 "	1/4 " 3/8 " 3/8 "		each each each	.16
			EXTEND				
			LATERD	Hole Sh	aft		
_	No.		Length	I.D.	D.D.		Price
0		uss ulated		¼" ¼"	¼" ¼"		\$0.25 .25
		to I	RASS SHA	FTING			
	No		1700 0117				Price
	540-14						\$0.20
	541—¼′ 542—¾′	' Dia. 12" L ' Dia. 8" Lo	ong ng			each each	
	70		BRE SHA				
	No						Price
	543-14	' Dia. 6" Lo	ng				\$0.25
	544—¼′ 545—%′	' Dia. 12" I. ' Dia. 8" Lo	ong ng			each each	.50 .60



GIANT JACKS

Milled with the central hole being reamed to size to insure a tight fit with all Giant Plugs. The No. 394 and No. 399A have a 10-32 thread tapped at the end permitting connection to be made. They are all made of brass and nickel-

plated	and	come	complete	with	nut	and	lug.		
No.		S	td. Pkg.	Α	E	3	C	Lis	Price
399A.	Jack		25	.1%"			3 ⁄8-24.	each	\$0.30
394	.Jack		25	$.1\frac{1}{16}''$	1/2	2"	$\frac{1}{2}$ -20.	each	.25
395	. Jack		25	. H"	1/2	<u>'</u>		each	.30
399	.Jack		25	. %"	5/	ś"	3/8-24.	each	.35



No. 392 INSULATED GIANT PLUG



Made so that no projecting edges are exposed, thereby protecting the user from unnecessary contact. Connection is made by soldering into the hole at the end of the threaded shank of the plug. Handle is 1\%" long by \%" dia.; length overall 3". Colors: red or black.

No. 392-Insulated Giant Plug..... List Price \$0.50



No. 393 INSULATED GIANT JACK

Designed to leave no metal part exposed on the panel. The %-24 brass nickel plated sleeve has a 10-32 threaded hole at the end permitting a connection at the end of the jack or to the lug under the head. Either assembly available complete with nut, insulaing shoulder washer, lock-washer and lug. Length overall 134". Colors: red or black.



HARD RUBBER INSULATED GIANT PLUG

Especially designed for use with diathermy cables, It has a 5%" dia, hole in the handle to take the largest cable. It is made of polished black hard rubber. The handle is 3" long by 7%" dia. Overall length is $4\frac{1}{13}$ ".

-Hard Rubber Insulated Plug.....



No. 341 Insulated Banana Plug This plug consists of our No. 404A plug with a larger handle 1%" long by ½" dia. Used on a therapeutic apparatus and test equipment. Overall length 2%". Colors: red or black.

No. 341—Insulated Banana Plug. List Price \$0.45

No. 404 Insulated Banana Plug

The plug is for experimental test leads because of its Scrulok solderless connection and the non-collapsible special alloy springs assembled on a pin preventing collapse of the plug spring. The handle is made of phenoile resin and is % by by 1" long. Colors: red, black, yellow and green.

No. 404—Insulated Banana Plug. . . . Std. Pkg. 50 List Price \$0.20



No. 604 BANANA PLUG

No. 605 HANDLE JACK



Consists of a banana jack inside an insulated sleeve. Connection is made by soldering to the end of the jack. Handle is made of cast phenolle resin \%" dia. by 1\%" long. Colors: red, black, yellow and green.

No. 605—Handle Jack. ... Std. Pkg. 50. ... List Price \\$0.25

TINNED LUGS

201	22		Ų %	
No.		Hole for Screw	Length	List Price Per M
1		6	18	\$ 4.75
2		10	%	4.75
		¼		
		%		
		1/2		
21		10	$1_{\frac{3}{16}}$	8.50
22			$1_{\frac{3}{32}}$	21.00
201		8	$1\frac{3}{18}$	8.50
96		6-8-10	%	7.00
97		• • • • • • • • • • • • • • • • • • • •	%	7.00
98		6-8		8.50
99	• • • • • •	4-6-8	···· 🚻 ·····	8.50

Birnbach **INSULATORS**



STEATITE CONE STANDOFF INSULATORS



Made of low absorption high Made of low absorption high tensile strength porcelain with a smooth glaze. All heights except the No. 430 are available with a Jack or a threaded hole top. Range of sizes are adequate for all needs. They are available only in a white glaze and come com-plete with crews, metal and

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-B→D

	CORRECTION								
433J	2 ¾ "	25	1 1/4 "	3/4 "	1/4 -20	_No. 395 Jack	39." 52."	1.20	
433	2 ¾ "	25	1 1/4 "	34 "	1/4 -20	1/4-20		1.00	
432J	1 1/2 "	5 A	7/8 "	5/8 "	10.32	No. 403 Jack	372"	.75	
	1 ½ "	50	/8	5/8 "	10 - 32	10-32	3,"	.55	
432	-		11"	1/2 "	8-32	No. 430 Jack	38" 18" 18"	.35	
431J	1"	50				8-32	16	.30	
431	1"	50	₹¥″	1/2 "	8-32		52,,		
430	%″	100	%″	70"	6-32	6-32	52"	\$0.20	
	Α.,,	Pkg.	В	Ç	D	E	Hole	each	
No.			-	_	inread	ded Holes M		g Price	
	Height	Std.			Thurs	ووا-اللملت			
			cork w	ashers.				List	

CORRUGATED FEEDTHRU INSULATORS



The six new corrugated type feedthru insulators have more than twice the leakage path of the straight type because of increased surface of the corrugations and recommends itself where a straight side insulator of equal height is not satisfactory because of its shorter leakage path. Brass nickel-plated hardware and cork mounting washer



	Height	Std.	****	M	lountin	nomurng wasner g	s supplied.
No.	Α	Pkg.	В	С	Hole	Hardware	List Price
479	1 % "	25	1 1/4 "	11"	10"	10-32	
479J	1 3% "	25	1 1/4 "	13"	16"		ea. \$0.55
4276	2 3/4 "	10	1 5% "	10"	3/4"	No. 403 Jack	ea65
4276J		10		1"		1/4 -20	ea. 1.00
4452			1 1/8 "		¾ ″	No. 394 Jack	ea. 1.20
4452J	4 1/2 "	5	2 1/8 "	1 ½"	1"	1/4-20	ea. 1.50
44525	4 1/2 "	- 5	2 1/8 "	1 ½"	1"_	No. 394 Jack	ea. 1.80



HIGH VOLTAGE FEEDTHRU INSULATOR

This insulator has been designed to meet the demand This insulator has been designed to meet the demand for an insulator having high dielectric and mechanical strength. The extra long leakage path is made possible by the corrugations on the top insulator. The bottom sleeve taper from a base dia, of $\mathbf{1}_{10}^{AB}$ " where the electric stress is greatest.

Height 15%"... Base Dia. 2"... Mounting Hole 1 1/4"... Hardware 1/4-20

METAL BASE INSULATORS





Designed to replace Designed to replace conventional porcelain insulators where failure of the base is due to cracking when fastened down. Extremely long leakage paths due to the corrugated surface is one of the important



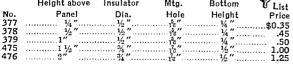
characteristics. They are made from high tensile strength low absorption porcelain smoothly glazed all over. Supplied with nickel-plated brass

						nei piace		
serews	and 1	iuts ar	nd cad	mium	plated d	rawn ste	el bases.	
						ounting Sc		
Cat. No	. A	Std. Pk	g.	В	C	D	Hardware	List Price
867	13%"	25	1%"	x 1,5,"	1 1/2 "	2 No. 8	10-32	ea. \$0.30
	1 3/8"		1 % "	$x 1\frac{5}{16}''$			No. 403 Jack	
4176	234 "	10	1 1/4 "	x 1¾"	138"	4 No. 10	1/4 - 20	ca55
4176J	234"	10		x 1%"		4 No. 10	No. 395 Jack	ea70
4451	41/2"	5	214"	x 2¼"	134"	4 No. 10	1/4 - 20	ea82
4451 J	41/2"	5	234"	x 214"	134 "	4 No. 10	No. 395 Jack	ea. 1.15

"LUCITE" FEEDTHRU INSULATORS

These feedthru insulators are ideal for bringing high frequency leads thru a panel. They are made of genuine Dupont Lucite. Because of its low loss at high frequency, it is well adapted to insulated elements of high frequency 6-32 hardware and the ¾" have 10-32 hardware.

Height above Insulator Mtg. Bottom



STANDOFF INSULATORS



The sizes range from 5%" to 4½" high in five properly graduated heights. Made of highly vitrified low absorption glazed porcelain. No washers are necessary for mounting as the mounting surface is ground flat; but for the No. 405 and No. 966 Standoff insulators, it is advisable to use cork washers which are available as they wished a surface is ground flat; but for the No. 405 and No. 966 Standoff insulators, it is advisable to use cork washers which are available as they hardware is supplied. Available in white or brown glaze.





						•••	with of blown	graze.
	Height				N.	1ountir	10 1	ist Price
No.	A S	td. Pk	g. B	C	D	Holes	Hardware	
405	56"	100	1"	31"				each
965	1"	50	14"	32 "	13"	32"	6 - 32	\$0.11
966	î"	50	13%"	74 7/8″	1"	32 " 32 "	8-32	.15
9661	î"	50				32	8-32	.15
866	1½"		1%"	7⁄8 ″	1"	16"	No. 403 Jack	.20
866J		25	1%"	1%"	114"	30	10-32	.20
	1 1/2 "	25	1%"	11/8"	11/4"	10"	No. 403 Jack	.25
866SJ	1½"	10	1%"	1 1/8"	11/4"	5 " 3 2 "	No. 395 Jack	.60
4275	234"	10	234 "	2"	21/8"	14"	14 - 20	.52
4275 J	234"	10	234"	2"	21/8"	1/4 "	No. 399 Jack	
4450	41/2"	5	35%"	214"	25%"			.90
4450J	41/2"	5	3%"			32" 32" 32"	14-20	00.1
	- /2	3	J /8	21/2"	2 %"	32"	No. 399 Jack	1.35

FEEDTHRU INSULATORS



Made of highly vitrified, low absorption porcelain smoothly glazed to prevent accumulation glazed to prevent accumulation of dust or dirt. Maximum strength is achieved by the proper proportions and flat mounting surfaces. Long insulating sleeves on the lower part of the insulator contribute much prope on birth voltages Briss nick.



to their performance on high voltages, Brass nickel-plated hardware,

No. 458 478 478J 4125 4125J 4234 4175	Height A " 1" " " " 1¼" " " 2¾" "	Std. Pkg. 50 25 25 25 25 10 10	B	C 14 15 16 18 18 18 18 18 18 18 18 18 18 18 18 18	lounting Hole Te	g Hardware 6-32 10-32 No. 403 Jack 10-32 No. 403 Jack ½-20 ½-20 No. 394 Jack		\$ Price \$0.22 .30 .38 .35 .40 .90 .80
71730	2 %	10	1 1/4 "	74	% "	No. 394 Jaek	ea.	1.15



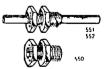
BEE-HIVE STANDOFF

Base measures 2" dia, with 3 holes on a 15%" circle, for No. 6 screws. Supplied complete with 12:24 nickel-plated brass screw and nuts. The No. 7664 has a No. 403 Jack. Available white or brown glaze.

		Std.	List
No.	Hardware	Pka.	Price
766-Standoff Insulator.	12-24 Screw .	. 10	.\$0.30
766J-Jack Type			

FRONT PANEL BEARING

The No. 550 Front Panel Bearing is cadmium plated brass for panels up to 3%" in thickness and for ¼" dia. shafts. The No. 551 and No. 552 are complete assemblies of the No. 550 and ¼ dia. brass shaft cadmium plates. shaft cadmium plated.



Cat. No.								t Price
550—Front	Panel	Bearing					each	\$0.16
551—Front	Panel	Bearing,	1/4	shaft,	3"	long	each	.45
552—Front	Panel	Bearing,	1/4	shaft,	6"	long	each	.55

FLEXIBLE COUPLINGS



These flexible couplings cover all needs of the constructor. Tandem operation of two or more units is possible without having the shafts in exact alignment. Flexibility without back-lash is obtained by the cadmium plated phosphor bronze springs, which are rigidly riveted to the insulation. All units fit 1/4" dia. shafts.

No.	Dia.	Insulation	Lis	t Price
360 361	1 1/4	Fibre	each	\$0.35
362	1 1/4	Bakelite	each	.50
202	1 10	Steatite	each	-60

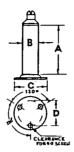


Birnbach INSULATORS

STEATITE PILLARS



These (steatite) pillar insulators have great tensile strength with extremely low losses at very high frequencies and are glazed on the outside to decrease surface leakage. They are tapped on both ends and are supplied complete with nickelplated mounting base and top hardware.



	Height	ı			Base Dia.	Lis	st Price
No.		Std. Pkg.	В	Hardware	С	D	each
450	1"	10	1/2 "	6 - 32	1 1/8"	7/8″	\$0.50
450J	î"	10	1/2 "	No. 403 Jack	1 1/8 "	7/s"	.60
451	1 1/2 "	10	1/2 "	6-32	1 1/8 "	7/8"	.60
451J	1 1/2 "	10	1/2 "	No. 403 Jack		7/8" 7/8"	.65 .65
452	2 1/2 "	10	1/2	6-32 No. 403 Jack	1 1/8"	7/8"	.85
452J	2 1/2	10	1/2 "	No. 403 Jack	1 18"	1.48"	1.15
453	2 1/2 "	' 5 ' 5	¾" ¾"	No. 395 Jack		138"	1.35
453J	2 1/2 '	5	3/4 "	1/4 -20	1 18"	$1\frac{3}{16}''$	1.50
454 454.1	4"	5	3/4 "	No. 395 Jack	: 1 n "	$1\frac{3}{16}''$	1.60

LUCITE SPREADERS

They are made of Dupont Lucite rod which water absorption. The holes are drilled to take a No. 12 wire. A serew at the end of the spreader locks the wire in position.

LUCITE SPREADERS	LUCITE RODS
	No. Dia. List Price per Ft.
List Price lo. Wire-Spacing Std. Pkg. Each	455
	4cn 16" 1.00
362"25\$0.45 374"2550	
38 6"	Available in lengths up to 48 inches

of highly vitrified, low absorption, smooth while glaze overall.	high tensile	strengtlı	porcelain	with	2
No.	Std. Pkg		Li	st Pri	

						_			
462—Spreader, 464—Spreader, 469—Spreader,	4"	long	 	. 20	 		eacu	.30	

These Antenna Insulators have exceptional These Antenna Insulators have exceptional low moisture absorption. The leakage path is long and the cross section is small and is consistent with the strength required, A smooth white glaze overall prevents the accumulation of dirt or ice.

FEEDER SPREADERS



No.	Std. Pkg.		
668-41/4" long	25	each	\$0.30
470—7" long	10	each	.90
471—12" long	5	. each	1.25
468—4 ½ " long			
Inculate	or 10	each	.40





LEADIN INSULATORS

Each cone is 2 ¾ ″ high and made of low absorption, highly vitrified glazed porcelain. The Nos. 4237 and 4238 Leadin Insulators have sufficient insulating bushings to insulate the rod that goes through the wall. In addition, 2 bushings are included, ¼ ″ and ½ ″ long, allowing complete insulation of the threaded rod of any length in multiples of ¼ ″. They come complete with brass nickel-plated hardware and lead and cork washers to permit a water-tight seal.

		•	•
No. Des			List Price
4235-10"	Rod		\$1 .7 5
4236-15"	Rod		2.00
4237-10"	Rod with bushings.		2.25
4238-15"	Rod with bushings.		2.85

STEATITE BUTTON



These specially designed steatite buttons are intended for use to simplify wiring and to be used as a binding post or a binding post insulator, or as a standoff insulator. Attention is called to the uniqueness of the design which prevents either section of the insulator from turning in respect to the special screen. The ing in respect to the special screw. both specially designed screw locks sections.



.....B ½"... No. 457.....

STEATITE PILLARS

(Without Hardware)



In many constructions, these unmounted threaded steatite pillars will facilitate assembly because of the one hole mounting and parallel mounting surfaces. They are made of glazed Steatite with threaded holes on both sides.

No.	Height	Dia.	Threaded Hole	List Price
443		1/2"	6.32	\$0.10
444		1/2"	6-32	.10
445	1″		6-32	30
446	1″½		6-32	.3 5
447	21/2"		6-32	
448	2 1/2"	3¼″		. 60
449	4"	¾″		9 5

AIRPLANE INSULATORS

Used on mobile antenna installations, particularly on aircraft, as they are shaped for the least air resistance. They are made of white glazed low absorption porcelain.



No. Length	Std. Pkg.	List Price
473—2"	100	each \$0.15
474—1½"	100	each .11
17 1 2 /2 111111111111111111111111111111		

STEATITE AIRPLANE INSULATORS

A very small compression type insulator with small wind resistance. It is $1 \frac{1}{2}$ " long and $\frac{1}{2}$ " dia.

No. 463-Std. Pkg. 25, List Price \$0.35

TUBE CLAMPS

These tube clips will be found extremely de-



clamps have holes for 1/4" t	ooits.			
Cat. No	To Fit	Tube		t Price
51—Clamp	1/. "	Dia.	each	\$0.18
52—Clamp	5,"	Dia	each	18
52—Clamp	16 ,,	Dia.	onah	.18
53—Clamp	%	Dia.	each	.10
EA Clamp	1/0 "	Dia.	each	.10
55—Clamp	3/4 "	Dia.	eacn	.30
56—Clamp	Ϊ"	Dia.	each	.40
57—Clamp	`` 7, "	Dia	each	.40
5/—Clamp	78	Dia.		

FLEXIBLE SHAFTS

At times there is difficulty getting the controls to the proper position on the panel. With couplings and these flexible shafts, locations can be made with ease on an offset and angles up to 90 degrees. The flexible shafts are made of phosphor bronze and fitted into ¼" dia. hubs. Cat No.

553—Flexible Shaft, 3" long ... each \$0.60 554—Flexible Shaft, 6" long ... each .85

TRANSMITTING TUBE SOCKETS

Improved design and additional features of the Birnbach transmitting sockets has increased their popularity and are accepted as standard. The 50 watt socket has extra heavy side-wiping phosphor bronze con-tact spring with the filament spring having a double contact to safely carry the heavy current. The tube base is supported by the current. The tube base is supported by the highly polished nickel-plated brass shell set in a highly vitrified low absorption porcelain base which is ground flat to prevent breakage. All brass nickel-plated screw and milled nuts are used.



screw and milied nats are used.		
Cat. No.	Lis	t Price
434—50 Watt Socket	each	\$1.70
435—10 Watt Socket	each	1.25

RCA ELECTRONIC COMPONENTS

TELEVISION ANTENNAS



COMPLETELY NEW DESIGN — BUILT TO LAST RCA 12-CHANNEL TELEVISION ANTENNA —
TYPE 204A1
BASED UPON YEARS OF FIELD EXPERIENCE

 Easily Assembled Ruggedly Constructed Uni-Directional

Here's an RCA "Leader" to meet the majority of your everyday antenna needs. Engineered and developed by RCA for plus-value service, RCA-204A1 is intended for use in most receiver locations where both high and low-frequency stations are in the same general direction. Unique RCA "V" attachments provide uniform directional char-

acteristics for all 12 channels.
RCA-204A1 12-Channel Television Antenna is simple in design and appearance. Sturdily built of aluminum, it will withstand high winds, sleet, and ice. Designed for use with 300-ohm transmission line, the 204A1 rates "A" for antenna achievement: - for over-all performance and unusually flat response over each of the two television bands. It can be readily combined with any of the RCA Stacking Kits for fringe or other difficult reception areas.

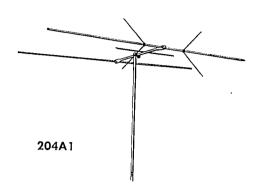
Supplied with all necessary hardware and sturdy 5 ft x 11/4" aluminum mast which may easily be extended by addition of RCA-207A1 antenna mast sections. Completely illustrated instructions for installations are included.

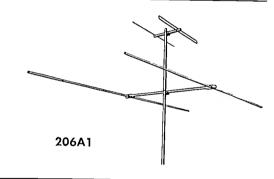


Here's an antenna that you can depend upon for optimum performance in locations where high and low-channel stations are widely separated. Sturdily built to provide long, dependable service, the 206A1 will withstand severe weather conditions.

RCA-206AI, thoroughly tested for over-all performance characteristics, provides superior reception. When used with 300-ohm transmission line, it requires no external transformers nor matching stubs.

Comes complete with harness, all necessary hardware and sturdy 5 ft x 1¼" aluminum mast which may be easily extended by addition of RCA-207A1 antenna mast sections. Completely illustrated instructions included.





ANTENNA ACCESSORIES

Bright Picture Transmission Line

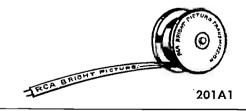
Especially designed for Television and FM. Special chemical-resistant plastic finish insures continued flexibility even in extreme heat or cold. Ultralow loss—less than 0.8 db per 100' at 50 Mc; less than 1.2 db per 100' at 100 Mc, 4.5 $\mu\mu$ f per foot capacitance. Propogation velocity 83%. Extra strong—supports a mile of its own weight (75 lbs.) before breaking. Stock No. 201A1. Sugg'd List Price: \$47.50 per 1000'.

Antenna Mounting Brackets

For use with RCA Antennas Stock #225A1 and #226A1. Readily adjustable to permit mounting on any roof—regardless of overhang. Can be attached to brick, stone or wood. Entire bracket is plated with bright zinc, preventing rusting and subsequent staining of building surfaces. Special angular supports eliminate sagging. Stock No. 227A1. Sugg'd List Price: \$7.50 per pair.

Twin-Lead Lightning Arrester

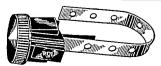
For use with FM and TV antennas. Easy to installcutting or stripping of transmission line is unnecessary. Fits any ½"-2" pipe. Continually dissipates static surges. Does not unbalance line. Brown plastic case. Stock No. 206X1. Sugg'd List Price: \$1.10.



227A1



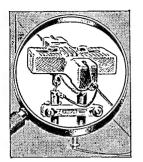
206X1



All prices in effect 5/15/49.



E. F. JOHNSON Company WASECA, MINNESOTA



THE JOHNSON "Q" AND JOHNSON "Q" BEAM

-					
COMPLE	TE "Q	" SYSI	EMS T		
Cat. No.	List Price	Band (Meter	a.		
137-2Q 137-6Q	\$7.00 10.50	2 6	***		
137-10Q 137-14Q	9.75 14.00	10 14	oi D		
137-20Q 137-40Q	16.50 28.00	20 40	p fr o		
ALUMINUM "Q" TUBIN					

Q" AND JOHNSON "Q" BEAM

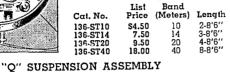
The consistent results obtained by the thousands of users of the JOHNSON Q antenna system are due to the extremely high efficiency of this famous antenna. Applications include half-wave doublet, either horizontal or vertical, harmonic or "long wire" radiator, radiator-reflector, radiator director, "V" Beam, JOHNSON Q Beam and others.

The JOHNSON Q Beam is a special application of the Q system. It consists of two half-wave Q antennas soaced 1-5 wave and Q sections connected in parallel at the bottom. In ordering specify two Q antennas for the lower frequency of the two bands desired. For example if you want a Q Beam to operate on 10 and 20 meters, order two JOHNSON Qs for 20 meters.

The -20Q and -6Q use aluminum tubing for the radiating portion as well as for the matching section. The 136-35 Jack Strip and 136-36 Plug Strip make an ideal feeder connection at the transmitter when the antenna is suspended.

JOHNSON Enamelled Copperweld Antenna Wire will not stretch nor sag. Prices are per 100 feet. Carried by most suppliers in bulk, it is available from the factory in any specified length.

10 136-ST10



"Q" SPACING BARS

Used for spacing tubing in matching transformer applications. Spacing is continuously variable from % " to 3%".

No. 136-33—Spacing Bar..... ENAMELLED COPPERWELD ANTENNA WIRE



Includes new type insulator and all necessary hardware for connecting "Q" matching section to antenna and transmission line. Insulator may also be used to bring off "Zepp" feeders from the flat top. List Price Cat. No.

FEEDER INSULATORS

Nos. 136-122, -124 and -126 are conventional feeder spreaders of high grade low absorption porcelain, Silicone impregnated 136-122 136-128

Cat. No. List Price Lg. 136-122 \$0.16 136-124 .23 136-126 .30 .16

136-122, -124, -126 bilicone impregnated 136-31 .16 for finest water repellent characteristics. No. 136-122 is provided with notches for $11_2''$ line spacing. All have $\frac{3}{2}x^2/2'$ cross section. No. 136-31 is a glazed porcelain transposition insulator which permits crossing transmission lines at frequent intervals to prevent radiation and provide 2' line spacing. 136-31

ENAMEL STEEL COREPURE COPPER WELDED TO CORE-



Cat. List B&S Ft.per Breaking
No. Price Gatuge 1b. Strength
144-348 84.45 10 34½ 1130 lbs.
144-352 2.20 14 85 400 lbs. INSTANT CRYSTAL SELECTOR

Ten frequencies with a twist of the knob with extra position for ECO. Accommodates all crystals with ½" spacing. With adaptors also takes 6 upright ¾" space crystals, plus 4 with ½" spacing. Bracket permits vertical or horizontal resulting. ing. Brace mounting.

126-220-1

Cat. No.



ANTENNA INSULATORS

These insulators include both wet and dry process porcelain. The 136-107 and 136-112 are wet process and are 1" in diameter. The Commercial Type is 11/2" in diameter, for use where much greater strength is necessary. The 136-104 is dry process and is 5/6" square, for service where the strength of the 1" or 11/2" types is not required.

These JOHNSON antenna insulators have long leakage paths, low capacity and their freedom from moisture absorption results in exceptional efficiency.

The 136-151 .152 .153 are wet process parcelain and are

The 136-151, -152, -153 are wet process porcelain and are ½" in diameter. End fittings are of non-corrosive aluminum alloy.

Cat. No. List Price Break. Strng. Lg. 136-104 \$0.20 400 lbs. 4" 136-107 1.10 800 lbs. 7" \$0.20 1.10 1.20

at. No.	List Price	Breaking Strength	Net	Overall
86-151	\$9.00	5000 lbs.	8"	151/2"
6-152	12.00	5000 lbs.	12"	191/2"
6-153	17.50	5000 lbs.	20′′	251/2"

о јоннѕон с 136-107, 136-112 JOHNSON MERCHANDAN AND AND REAL PROPERTY.

136-151, -152, -153



JOHNSON UNIVERSAL ROTOMATIC ANTENNA ARRAY



New direction indicator and Beam control is Selsyn motor operated.



Heavy-duty drive unit is self-lubricating a fully enclosed.

Available with Parasitic or Phased Driven Elements. Enjoy more QSOs - work more DX with the new JOHNSON Universal Rotomatic Beam.

The new symmetrical unidirectional beam employing phased driven elements is easy to tune - performs beautifully.

DeLuxe Models of the parasitic or phased arrays are available for two-band operation, employing two separate sets of elements but only one transmission line.

NEW IOHNSON PARASITIC ARRAY

When you see it you will realize it's in a class by itself! New, unique design allows an infirite variety of element lengths and spacing. Perfect impedance matching on two bands — any impedance from 50 to 600 ohms — coaxial or open wire line.

NEW ROTATOR AND DIRECTION INDICATOR

The heavy-duty drive unit will take rain, sleet and high winds in its stride - will turn on the coldest mornings. Rotation is instantly reversible, 360° at 1½ RPM. Motor control and antenna relay switch are contained in the selsyn indicator case.

The elements, rotator, direction indicator, etc., may all be purchased separately.

See your JOHNSON Jobber for Rotomatic catalog (includes prices)

ROTOMATIC FEATURES

√ New Antenna Array

The entire unit is so sturdy that it will withstand heavy icing and high winds.

Two-band operation with Deluxe

model. Two arrays fed with same transmission line, switched by low-loss RF relay. New Matching System

✓ New Matching System

New matching system permits efficient wide band operation and freedom to move about from the low to the high end of the bands. In addition, either open wire line or coaxial cable may be used.

✓ New Heavy Duty Drive Unit Powerful, smooth, continuous rotation either direction at 1½ RPM. Mechanism is self-lubricating and fully enclosed in weather-

Mechanism is self-iubricating and fully enclosed in weather-proof housing.

Universal bracket for mounting on pole or platform. May be driven with 1/20 HP motor or larger — rated at 1750 RPM.

✓ New Direction Indicator and Beam Control

Selsyn motor controlled indicator. Indicating arrow glides through 360°, in either direction, over a map with compass graduations. Stop beam anywhere instantly.

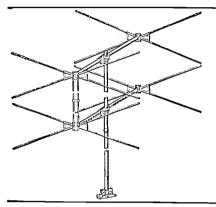


JIFFY-RIG TELEVISION ANTENNAS

Taco Jiffy-Rig Antennas are the answer to the quickest installations without any electrical or mechanical sacrifice. These antennas come completely assembled. and are readied for installation by merely opening up and tightening a few screws. Elements are all securely

locked in place when antenna is installed.

For performance curves and field patterns on all Taco antennas, refer to Catalog No. 30. Tests are made on all models at the thoroughly equipped Taco laboratories and testing grounds in Sherburne, N. Y.



LAZY X ANTENNA TYPE 950

First introduced by Taco in 1940, this antenna has a single forward lobe for both high and low channels. It has a high front-to-back ratio, high gain, and broad coverage. Available either as a stacked or single antenna. Stacked antenna has approximately twice the gain of single. Outstanding characteristic is stability of impedance and gain over far greater frequency range than most other types. Matches popular 300 ohm lead-in and receiver input.

CAT. No. 950—Stacked Lazy X Antenna for channels 2-13. 2 X Antenna-Re-flectors, connecting line between an-tennas, bakelite terminal panel, mast swivel bracket, 2 five-foot mast sections. (Shipping Wt.: 11 lbs.) List Price \$41.50 CAT. No. 951—Stacked Lazy X Antenna. Same as No. 950 less 2 five-foot mast sections and mast swivel bracket. (Shipping Wt.: 9 1/2 lbs.)...List Price \$34.00

CAT. No. 952—Single Lazy-X Antenna with five foot mast and accessories. (Shipping Wt.: 7 lbs.) List Price \$21.00

CAT. No. 953—Single Lazy-X Antenna less mast and accessories. (Shipping Wt.: 5 lbs.).....List Price \$16.50

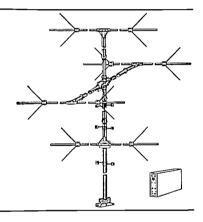
ALL-CHANNEL REVERSIBLE BEAM ANTENNA TYPE 900

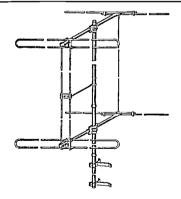
An entirely new and improved approach to co-channel interference caused by stations approximately 180° apart, on the same channel. Uses four driven elements instead of parasitic elements, resulting in extremely high front-to-back ratio ranging from 5:1 up to 20:1. Antennas are connected in pairs, each pair with separate lead to receiver. Diplexer supplied with antenna eliminates any ghosts due to mismatch between receiver and lead. Diplexer incorporates a direction-reversing switch to reverse receiving direction 180°. Antenna receives equally well in either direction. Covers all channels 2.13 with a single lobe.

CAT. No. 900 - All-Channel Reversible CAI. No. 900 — All-Channel Reversible Beam Antenna Array. Consists of: 4 sets dipole elements with wings; 4 dipole connecting links with terminal panel; 3 five-foot section masts; accessories, 1 diplexer. (Shipping Wt.: 14 lbs.)

List Price \$59.50

CAT. No. 905 - High-Band Reversible Beam Antenna Array. Consists of: 4 highfrequency dipoles: 4 connecting links with terminal panel; 2 five-foot mast sections; 1 crossarm; accessories; 1 diplexer. (Shipping Wt.: 8 lbs.) List Price \$32.00





STACKED HIGH-GAIN ANTENNA TYPE 995

For fringe areas where low-band channels are operating, this antenna has no equal as proved by its record-breaking history. Comes tuned for any one channel (2, 3, 4, 5, 6) but will receive adjacent channels with slight attenuation. Order for weakest channel. Cleans up fuzzy signals with its high signal-to-noise ratio. Used in high-signal areas to eliminate interference. Extremely rugged mechanically. Used with Catalog 992-D () director for extreme fringe areas.

CAT. No. 990-()—Stacked High-Gain Antenna. Specify channel in bracket. Consists of: 2 sets tuned dipole-re-flectors; transmission lines with center terminal panel; transmission line brace. (Shipping Wt.: 9½ 1bs.) List Price \$32.00

CAT. No. 995-()—Stacked High-Gain Antenna. Same as No. 990 plus the following: 3 five-foot mast sections; 1 set 190-7 mast brackets; 6 screw-eye insulators; 4 mast insulators; 2 guy rings. (Shipping Wt.: 14 lbs.) List Price \$40.00

INDOOR ANTENNA TYPE 975

For strong signal areas where regular antenna is not feasible. May be located at receiver or in attic. Base made of mottled mahogany-finished bakelite. Dipoles nickel-plated with metal-balled tips. Mounting feet permit anchoring to rafter in attic. Dipoles may be set in any position or length, thus covering all channels. No knobs to tighten due to exclusive Taco ratchet design.

CAT. No. 975—Indoor Antenna. Individually packed. Standard package, 6 antennas. (Shipping Wt. for 6: 13 lbs.).....List Price \$6.50 each

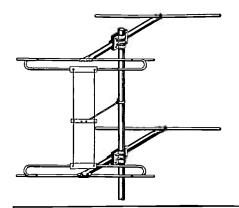
DIRECTOR TYPE 992-D-(

For increased gain and sharper tuning on channels 2, 3, 4, 5, 6, this director has been designed to slip into the open end of Taco No. 995. Increases voltage gain by 3 db for tuned channel. For areas where sharper tuning and higher gain is desired, the addition of director greatly improves reception. Director may be added any time to an existing installation.

CAT. No. 992-D-()—Director (Channel 2, 3, 4, 5, or 6). Consists of: 2 crossarm assemblies with director elements assembled by Jiffy-Rig construction. (Shipping Wt.: 2 lbs.) List Price \$9.50



JIFFY-RIG TELEVISION ANTENNAS



STACKED HIGH-GAIN ANTENNA TYPE 944 JIFFY-RIG CONSTRUCTION

The finest in high-frequency antennas. Used in fringe areas and areas of average signal strength with excellent results. Cleans up high-frequency signals through the use of two 600-ohm folded dipoles tapped at center terminal for a transmission line impedance of 300 ohms. Exceptionally flat field characteristics eliminates ground reflections. Broad banded, but may be peaked for additional gain on any high-frequency channel by the addition of directors.

CAT. No. 944 -- Stacked High-Gain Antenna for high-band channels 7-13. Consists of: 2 600-ohm folded di-Consists of: 2 600-ohm folded di-pole antenna-reflector combination mounted on crossarm; terminal pauel; 5-foot aluminum mast; mast insulator. (Shipping Wt.; 5 lbs.) List Price \$16.50

CAT. No. 947 D-H. F. Directors adjustable for any high channel. Attaches to Cat. 944 antenna. (Shipping Wt.: 3 lbs.)....List Price \$3.50

2 packed per carton

YAGI ANTENNA TYPE 957 JIFFY-RIG CONSTRUCTION

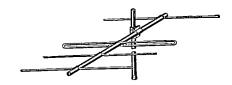
An exceptionally high gain, sharply tuned antenna. Performance comparable to stacked antenna-reflector array for any one channel. Available in 3 models to cover the 7 upper channels. Model 957-8 covers 7, 8, 9; 957-10 covers 9, 10, 11; 957-12 covers 11, 12, 13. Sharp tuning means elimination of much interference and ghosts caused by reflected signals. May be stacked with Type 958 Stacking Kit for a 9 db gain. Jiffy-Rig construction, fully assembled.

CAT. No. 957-(8, 10 or 12)—Yagi Antenna. Consists of: 1 folded dipole antenna; 1 reflector; 2 directors; 1 crossarm with mast-mounting clamp. 5 ft. mast (Shipping Wt.: 4 lbs.)

List Price \$11.00

CAT. No. 958-((8, 10, or 12)-Yagi Antenna Stacking Kit. Same as above without mast but with transmission line for stacking. (Shipping Wt.: 3 lbs.)....List Price \$9.00

CAT. No. 959-(8, 10, or 12)—Stacked Yagi Antenna. Combination of a 957 and a 958 antenna. (Shipping Wt.: 6 lbs.).......List Price \$18.75



TYPE ANTENNA SINGLE HIGH-BAND

Ideal for use as high-frequency adapter in average to strong signal areas. Jiffy-Rig construction matches 300ohm antenna and permits use of common transmission line through use of matching network. Used as antenna in areas where only high frequency stations are operating. May be stacked in weak signal areas using Type 946

CAT. No. 945—Folded Dipole Antenna. Consists of: folded dipole with reflector; 5-foot mast. (Shipping Wt.: 2 lbs.) List Price \$7.00

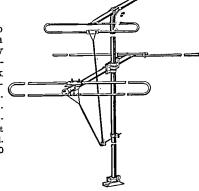
CAT. No. 946—Folded dipole Stacking Antenna. Same as above less mast. (Shipping Wt.: 1 lb.).....List Price \$5.75

HI-LO BAND ANTENNAS TYPE 920 AND 925 JIFFY-RIG CONSTRUCTION

An improved version of the famous Taco 465, original piggy-back Hi-Lo Band Antenna. The most popular types for areas of average signal strength where both high and low bands are in operation. Separate high and low band elements allow independent orientation of high and low-band antennas for elimination of ghosts and sharpness of picture. Matching network minimizes interaction between sections, and allows full freedom in orientation. Also available as a stacked high and single low-band antenna. Cat. No. 920 for increased gain usually needed in the high-band channels.

CAT. No. 925-5—5-foot Hj-Lo Band Antenna. Consists of: High and low-band folded dipole antennas-reflectors; 5-foot mast; matching network; mast swivel base. (Shipping Wt.: 6 lbs.)......List Price \$17.00

CAT. No. 925-10-10-foot Hi-Lo Band Antenna. Same as above plus extra 5-foot mast section, guy anchor, extra mast standofl. (Shipping Wt.: 7 lbs.) List Price \$20.00



FOLDED DIPOLE ANTENNA-REFLECTOR

An economical, dependable folded dipole antenna for prime service area use. Single lobe in low band, Jiffy-Rig construction assures quick erection. Matches 300-ohm transmission line. For added gain a 992-() director may be used.

2 mast insulators; swivel base. (Shipping Wt.: 5 lbs.) List Price \$15.00 CAT. No. 940-L—Folded Dipole Antenna-Reflector Type 940. Consists of: 1 folded dipole; crossarm with mast clamp; reflector; 1 5-foot mast;



JIFFY-RIG TELEVISION ANTENNAS

TWIN-DRIVEN YAGI ANTENNA

For fringe area reception a rotator often permits maximum results. Taco twin-driven Yagi Antenna, due to its high gain, is the ideal antenna because of its low overall height. In sub-fringe areas use 980-() stacked model with a gain of over 9 db. Special bulletin available on request. Tuned for each low band channel. Use 959-() for high band stations. The antenna and first director are driven elements for improved impedance match.

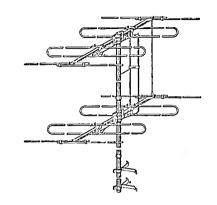
CAT. No. 980-()—Two-Bay Twin-Driven Yagi Antenna, less mast. List Price \$49.50

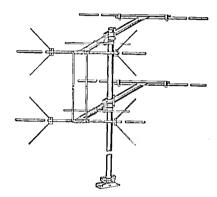
CAT. No. 981-()-Single Bay Twin-Driven Yagi Antenna, less mast.

List Price \$24.00

CAT. No. 985-()—Two-Bay Twin-Driven Yagi Antenna with 15-foot mast. List Price \$59.50

CAT. No. 986-()-Single Bay Twin-Driven Yagi Antenna with 5-foot mast.
List Price \$27.50





SINGLE-LOBE DOUBLE-DOUBLET TYPE 912

Originally designed as a low band antenna and well known as Cat. No. 435 Lazy H Antenna. Re-designed for high-low band operation by the addition of high frequency wings and H. F. reflectors to give the one direction lobe necessary for most localities. High gain and excellent front-to-back ratio obtained by use of separate high frequency reflectors. Recommended for low signal strength areas. Good FM coverage. Available as a signal bay unit Cat. 910 for higher signal strength areas.

CAT. No. 912-Single-lobe Double Doublet Antenna. Consists of: 2 antenna-reflectors on separate crossarms; high frequency reflectors; connecting network; 2 five foot masts; mounting accessories; high frequency wings. (Shipping Wt.: 8 lbs.)....List Price \$25.00 CAT. No. 910—One-Bay Single Lobe Antenna for high and medium signal strength areas. Consists of: antenna-reflector combination on one crossarm; high frequency reflector; high frequency wings; 5-foot mast; mounting accessories. (Shipping Wt.: 6 lbs.)

List Price \$15.00

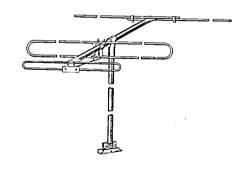
HI-LO BAND IN-LINE ANTENNA TYPE 930 AND 932

Designed for areas of average-to-strong signal strength where both high- and low-band channels are in the same direction. Gain is high in both bands. Directivity lobes show this antenna as having one main forward lobe in both the high and low band. Matching network eliminates troublesome interaction between elements. Perfect match for 300-ohm lead-in. A stacked model Cat. No. 932-10 is available where additional gain is required in either band.

CAT. No. 930-5-5-foot In-Line Antenna. Consists of: High and low-band antenna sections with low-band reflector; 5-foot mast; jumper network; 3 screw-eyes; mast standoff; mast swivel bracket and mounting screws. (Shipping Wt.: 6 lbs.)...List Price \$17.00

CAT. No. 930-10—10-foot In-Line Antenna. Same as 910 plus one extra 5-foot section of mast. (Shipping Wt. 7 lbs.).....Lits Price \$20.00

CAT. No. 932—10-foot Antenna. Consists of: 2 high-low antenna-reflectors; 2 crossarms; 2 five-foot mast sections; mounting accessories. (Shipping Wt.: 10 lbs.) List Price \$34.00



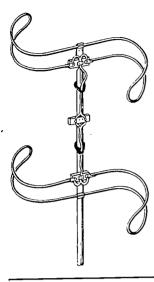
ACCESSORIES SUPPLIES AND

Extension Masts Sectional Masts Mast Couplings Mast Brackets Mast Swivel Brackets Antenna Insulators Strain Insulators Turnbuckles Guy Wire

Crossarm Connectors Mast Guy Anchors Mast Standoff Insulators Ribbon Wire Insulators **Baseboard Standoffs** Porcelain Nail Knobs Lightning Arrestors **Shorting Bars** Replacement Parts

Screw-eye Standoffs Ribbon Transmission Line **Concentric Cable** Twisted Pair Lead-in H. F. Splicing Tape Window Lead-in Strips Ground Rods **Ground Clamps Ground Straps**





FM ANTENNAS

FM OMNIDIRECTIONAL ANTENNA TYPE 624

This antenna has nearly the same gain as a single dipole in the FM band, which is unique for an antenna of the non-directional type. Covers FM band with practically equal gain throughout, due to its 300-ohm impedance. Gain and band-width greater than that of turnstile antenna. For areas with less signal strength, the 624 may be stacked $\frac{1}{2}$ wave-length between elements for maximum gain and minimum interaction. In a stacked array it is possible to peak the antennas for weaker stations.

CAT. No. 624—Omnidirectional Antenna. Consists of: 1 S-Type folded dipole with terminal panels; 1 5-foot aluminum mast; 2 mast insulators; 60-foot transmission line; 2 ribbon-type standoff insulators; 2 mast clamps; mounting screws. (Shipping Wt.: 4 % lbs.)

List Price \$11.00

CAT. No. 624-L—Omnidirectional Antenna. Same as above less transmission line. (Shipping Wt.: 4 lbs.).....List Price \$8.00

CAT. No. 624ST—Stacked Omnidirectional Antenna. Consists of: 2 S-Type antennas; 1 stacking transmission line with terminal panel and mounting clamp; 2 5-foot aluminum mast sections; 1 coupling for mast with mounting panel; 60-foot transmission line; 2 ribbon type standoff insulators; 2 mast clamps with mounting screws. (Shipping Wt.: 6½ lbs.)

CAT. No. 624ST-L—Stacked Omnidirectional Antenna. Same as above less transmission line. (Shipping Wt.: 6 lbs.)......List Price \$15.00

FM FOLDED DIPOLE ANTENNA-REFLECTOR

The folded dipole is the best type FM antenna inasmuch as the spread is only 10% above and below the mean frequency. Has a flat response of 3 db over entire FM band, Unidirectional characteristic is ideal for pinpointing in noisy locations. Mechanically rugged. Electrically perfect

CAT. No. 620—Folded Dipole Antenna-Reflector. Consists of: 1 folded dipole; 1 reflector with crossarm; 5-foot aluminum mast; 2 mast insulators; 2 mast-mounting straps with mounting screws; 2 standoff insulators; 60-foot 300-ohm transmission line. (Shipping Wt.: 4% lbs.)

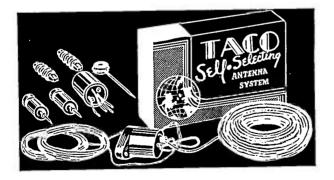
List Price \$13.50

CAT. No. 620-L—Folded Dipole Antenna Reflector. Same as above less transmission line. (Shipping Wt.: 3 ½ lbs.) List Price \$10.50 CAT. No. 621—Folded Dipole Antenna. Consists of: 1 folded dipole with terminal block; 60-foot 300-ohm transmission line; 1 5-foot mast; 2 mounting straps and mounting screws; 3 special screw-eyes. (Shipping Wt.: 3 ½ lbs.) List Price \$10.25 CAT. No. 621-L—Folded Dipole Antenna. Same as above less transmission line. (Shipping Wt.: 2 ½ lbs.) List Price \$7.25

FM STACKED HIGH-GAIN ANTENNA

For low-strength signal areas. Maximum gain through proper spacing and matching. Impedance at terminal panel is 300 ohms, assuring good match. Designed to retain broad band coverage despite gain. Front-to-back ratio approximately 15:1; gain about 6.5 db over reference dipole in FM band. Built to withstand all kinds of weather. May be used with a rotator for pinpointing reception in fringe areas.

CAT. No. 635—Stacked Folded Dipole Antenna-Reflector. Consists of: 2 folded dipoles; 2 reflectors with crossarms; 2 transmission lines with terminal panels; 2 5-foot mast sections; mounting hardware. (Shipping Wt.: 9 ½ lbs.).....List Price \$25.00



ANTENNA SYSTEMS

ALL-WAVE NOISE REDUCING ANTENNA SYSTEM

Taco AM antenna kits have been designed and manufactured to perform the important function of delivering as much signal strength to the receiver as possible, and at the same time to hold back undesirable background noises. The signal-to-noise ratio is extremely high, due to the matching transformers incorporated in the following systems.

DOUBLET ANTENNA SYSTEM TYPE 220 FM

Balanced doublet type covering the standard broadcast, shortwave and FM bands. Completely wired, soldered and tested. Includes Type 221 antenna transformer, two 30-foot coils of aerial wire, 60-foot transmission line, and all necessary hardware. Standard Package: 6.

CAT. No. 220-FM—(Shipping Wt.: 4 lbs.).....List Price \$13.50 each CAT. No. 220—Antenna, AM only.....List Price \$12.75

MULTIPLE OUTLET SYSTEM

Master antenna system for connecting 10-30 AM or FM receivers to one antenna using one or several transmission lines. Used extensively in schools, hospitals and apartment houses. Special type antennas for school public address installations.

INFORMATION ON FM AND AM ANTENNAS IS CONTAINED IN SPECIAL TACO CATALOG.



Premax Adjustable Tubular Antennas have been widely used in radio fields for a long period of years and have shown exceptionally efficient, dependable performance under most severe climatic and shock conditions, both in continental United States and abroad. They are available in various lengths to meet all requirements, in monel, aluminum and steel. Mountings and insulators will be found on page S-48.

MONEL ANTENNAS FOR CORROSION RESISTANCE

Premax Monel Antennas have an outstanding combination of strength and corrosion resistance that is vital to trouble-free communications, whether at land or at sea . . . in the tropics or the arctics. The monel used in these Premax Antennas . . . two-thirds nickel and one-third copper . . . is twice as stiff as bronze, strong as structural steel. Yet it will not corrode or lose finish on all sizes.

SPECIFICATIONS

finish on all sizes. Premax Monel Antennas are built up of multiple sections of hard-drawn monel tubing of a tensile strength exceeding 125,000 pounds per square inch. They are available in five standard units, fully telescoping and adjustable to any height between the minimum and maximum shown. The locking device employs a special knurled thimble and split friction clutch sleeve and holds the sections firmly at any desired height, also providing perfect electrial contacts. trial contacts.

No.	Description	Ext'd. C'la Lgth. L	ips'd. gth.	Base O.D.	Base I.D.	Wgt. ea. lbs.
MM-419	2-Sec. Tele. 3-Sec. Tele	about 13' about 19'	6′9″ 6′9″	.615" .747"	.545" .667"	$\frac{234}{5}$
MM-430	5-Sec. Tele. 5-Sec. Tele. 5-Sec. Tele. Heavy	about 30'	5′8″ 6′9″ 7′8″	.893" 1.065" 1.250"	.799" .945" 1.120"	$7\frac{1}{2}$ 13 21

ALUMINUM ANTENNAS FOR LIGHT WEIGHT

HEAVY-DUTY NON-ADJUSTABLE

Another type for special installations under extraordinarily trying conditions is a Heavy-Duty, Non-Adjustable Aluminum Antenna in either $17\frac{1}{2}$ or 35 length. This is a specially heat-treated Antenna designed to withstand wind velocities up to 100 m.p.h. The tubing is step-tapered from a base diameter of 2'' to a top of $\frac{1}{2}$ on the 35' mast and a base of $\frac{3}{4}$ to a top of $\frac{1}{2}$ on the $17\frac{1}{2}$ mast.

ALOMINOM AMIENNAS FC	JK LIC	SLII AA EK	וחכ			
Premax Adjustable Type Aluminum Antennas are designed to provide strength to meet the most exacting conditions, for marine, mobile erection and dependable performance are important considerations. They are ideally adapted for use in radio telephone installations on fresh-water craft and commercial installations where convenience	light-we and co	mmercial inst	rrosion resist: allations whe ECIFICATIONS	ince and re conv	enience	e in
These Antennas are built up of tubing that is specially drawn seamless tempered aluminum with diameters, gauges and temper engineered to withstand wind velocities up to 60 mm h. The leaf	No. AL-106 AL-312	Description 1-Pc. Taper Rod 2-Sec. Tele.	Ext'd. C'laps'd. Lgth. Lgth. 6'3" 6'3" 12'4" 6'4"	0.D. .313"	Base I.D.	Wgt. ea. lbs.
tact between sections. Six units are available, all fully telescoping.	AL-518 AL-324 AL-530	3-Sec. Tele. 4-Sec. Tele. 5-Sec. Tele.	18'5" 6'4" 24'4" 6'4" 30'0" 6'5"	.500" .750" 1.000" 1.250"	.334" .584" .834"	1½ 3 5 7
HEAVY-DUTY NON-ADJUSTABLE	AL-535	6-Sec. Tele.	35'8" 6'5"	1.500"		12

HEAVY-DUTY, NON-ADJUSTABLE

AM-017 1-Pc. Taper Tube 17'9" 17'9" .969" .689" 5 AM-035 2-Sec. Taper 35'0" 17'9" 2.000" 1.732" 19 (For Base Insulators and Mountings, See Page S-48)

STEEL ANTENNAS FOR LOW COST

No.	Description	Ext'd. Lgth.	C'laps'd. Lgth.	Base O.D.	Base I.D.	Wgt ea. lbs.
112-M 318-M	3-Sec. Tele.	11′8″ 17′3″	6'1" 6'2"	.656" .875"	.556" .775"	47
224-M	5-Sec. Tele.	22′9″ 28′3″	6′3″ 6′4″	1.063" 1.250"	.963" 1.150"	11 15
136-M	f 6-Sec. Tele. (For Base Insulators	33'9" and M	6′5″ ountings,	1.500" See Page	1.400" (S-48	20

Unit 618-M

CORULITE ADJUSTABLE **ELEMENTS FOR ROTARY BEAMS**

Premax Corulite Elements are designed to meet the need for lightweight but sturdy elements for use in horizontal arrays and similar applications. They are unusually light in weight and their special corrugated or reed design provides exceptional strength and rigidity so essential in horizontal types of installations. All parts are heavily electro-plated to provide corrosion resistance and high electrical conductivity. A positive elamp, spot-welded to the tubing, permits adjustment in length and assures rigid joints and positive electrical contact between the telescoping sections. Ease of adjustment between the two halves of each component element is provided by the Premax "Hairpin" Tuning Bar. By its use it is possible to have all of the elements set at a single physical length and the variation in their electrical length may be accomplished by the "Hairpin."

Corulite Elements are available in one, two, three or four-section units as shown in the specifications at the right. These elements meet all requirements for the various five to twenty-meter arrays in general use and are ideal for combinations in commercial, FM, television or amateur bands.

Premax Corulite Elements are available in one, two, three or four-section units as shown in the specifications at the various five to twenty-meter arrays in general use and are ideal for combinations in commercial, FM, television or amateur bands.

sion or amateur bands.

No.	Description	Extended Length	Collapsed Length	Base O.D.	Recommended For	Weig Per	
105-M	1-Section	5'0"	5'0"	.625''	6-meter	1	lb.
108-M	2-Section	8'2"	4'7"	.750"	10-meter	2	lbs.
113-M	3-Section	12'4"	4'8"	.875"		$3\frac{1}{2}$	lbs.
618-M	4-Section	17'0"	5′3″	1.000"	20-meter	$5\frac{1}{2}$	lbs.

PREMAX PRODUCTS, DIVISION OF CHISHOLM-RYDER COMPANY, INC., NIAGARA FALLS, N. Y.

Copyright by U. C. P., Inc. S-45



Television and FM Antennas

Television transmitters emit horizontally polarized waves. However, near the receiving antenna, due to reflections from tall trees, buildings and other obstructions, there is bound to be a vertical component which, when combined with the horizontal component, will run the angle of polarization somewhat above the original horizontal plane.

Thus a "direct" and a "reflected" signal often combine at the receiving antenna and where an ordinary horizontal type dipole antenna is used this combination of signals produces only a minimum of desired signal because one signal tends to cancel out the other.

With the Premax Adjustable V Dipole Antenna the proper vertical or horizontal adjustment of the elements will correct this condition and make the two signals combine in phase, thereby increasing rather than reducing the received signal.

Premax dipole elements are designed to permit any desired adjustment of the angle for strongest reception (usually 35° to 45° above the horizontal plane) and they can be securely locked in the position deemed best.

Another feature of the Premax Adjustable V Dipole Antenna is that, properly mounted, it permits a sufficient signal energy at the antenna terminals to minimize the importance of the otherwise difficult task of perfect impedance matching.

Many leading radio engineers who have tested the Premax Adjustable V Dipole Antenna, mounted reasonably high and in the clear, find it insures optimum reception of signals from all of the TV stations which come within the line of sight.

COVERS ALL TELEVISION & FM CHANNELS

cost! Easy to erect! Oversize elements! Adjustable V Dipole design! Two completely sepa-rate arrays on one mast, each of dipole and reflector. Pro-

and reflector. Provides maximum signal pickup for all channels in HF and LF bands as well as for FM. Fully adjustable in both horizontal and vertical planes. Interconnected by patented AAK divider coil system. Lic. AAK, Inc. Pats. 2,282,292 2,422,458

Can also be had in individual antennas for either HF or LF. Then,

tennas for either HF or LF. Then, at any time, the other array may be added to give full two-band

T-448—LF-HF Antenna complete, less transmission line. TL-448—LF-HF Antenna complete with 75' 300-ohm. transmission

TA-4481—LF Antenna and reflector only, including mast, less transmission line. TAL-4481-Same as TA-4481 but with 75' 300-ohm transmission

line.
TB-4482—HF Antenna and Reflector only, including mast, less transmission line.
TBL-4482—HF Antenna and Reflector only, including mast and 75' line.
TC-4483—HF Conversion Unit, less mast, less transmission line.
TD-4484—LF Stacked Array, with 9' mast, less line.

FM-130 FM-230

FM and TV ADJUSTABLE "V" ANTENNAS

Designed for maximum response for FM and TV bands. Dipole arms of heat-treated aluminum with wire terminals for lead-in connections. 50" minals for lead-in connections. 50" tubular steel support mast. Arms may be locked at any designed angle. Simple, light-weight design is simple to creet and install. Provides better reception than any straight dipole in congested

No. FM-130—FM Antenna complete with mounting, less transmission line.

-Same as FM-130 but No. FML-130-with 75' 30 300-ohm twin-lead transmission line.

No. FM-230-Same as FM-130 but with reflector, less transmission line.

FML-230—Same as FM-230 but ith 75' 300-ohm twin-lead transmission line.

ROTARY BEAM ANTENNA FOR 6-10-11 METER BANDS



high-gain directive A high-gain directive Antenna with many dis-tinctive features and high degree of flexibility for use on 6, 10 or 11 meter bands. Aluminum supporting frame. Seam-less duraluminum tubing elements readily adjust-able in length for oper-

ation at optimum efficiency in any band listed. Light in weight with slight wind resistance.

RB-6309 Kit includes frame, 3 pr. Elements with necessary insulators and hardware including T-match accessories but no trans-mission line. Weight 30 pounds.

309-A Extra Elements only, no frames, insulators or hardware included. Packed in pairs. Weight 2 lbs. per pair.

HAND-OPERATED TURNTABLE

Will support the largest type of Rotary Ream Assembly and permits rotation for full 360° in either direction. Formed of heavy sheet steel, spot welded. Steel angles spot-welded inside housing for additional strength. Platform or turn-



table is 10" x 12" formed of extra heavy sheet steel, is supported by 7" ball thrust bearing. Main shaft supported by two bearings to prevent side-play. %" opening through center shaft for lead-in wires. Duraluminum control cable pulleys and 6' galvanized flexible steel cable. Shipping weight 17 pounds.

PREMAX PRODUCTS, DIVISION OF CHISHOLM-RYDER COMPANY, INC., NIAGARA FALLS, N. Y.



Mobile and Police Antennas

CENTER-LOADED TUBULAR TELESCOPING MARINE ANTENNA

Gives a remarkable gain over the signal produced by a base-loaded type of same overall length. At high-frequency end of its 2000 to 3000 kc range it gives a measured effective signal power of 6 decibels when compared with a base-loaded antenna of similar length. This is equivalent to that produced by quadrupling the transmitter power output. For example, with this new Antenna, a 10w transmitter will produce a signal equal to that of a 40w transmitter using a base-loaded antenna and tuning system. and tuning system.

The base of this Antenna presents such a low impedance that less loss is experienced with leaky base insulators due to icing, wet weather or water spray. The line feeding the base is a low impedance line and is not critical as to length and body-capacity effects as is the case of the base-loaded antenna where the loading coil is housed in the transmitter cabinet.

The Antenna consists of two telescoping, adjustable base sections on which the loading coil is mounted, with a tapered top whip section. Each tubular section and the top whip is approximately 6½' long, providing a total extended length of about 19'. The base sections collapse to a single unit and the top whip section telescopes through the coil into the lower sections, making a collapsed length of only about 7½.

Available in monel for salt-water installations or in aluminum for fresh water use. CLM-519-Monel type Base O.D. .893" 1.D. .799" Base O.D. 1.000" I.D. .834"

CLA-619-Aluminum type

Solid Stainless Steel Tapered Antennas

Recommended for use where extreme durability and great corrosion resistance are necessary. One-piece solid hard-drawn stainless steel rod, tapered from '4" base to 1/8" top. A tough, durable Antenna that will take it. Available in three standard lengths, to fit all standard mountings shown on page S-48.

No. SP-472-Stainless Steel Tapered Antenna, 72" long. No. SP-484-Stainless Steel Tapered Antenna, 84" long. No. SP-496-Stainless Steel Tapered Antenna, 96" long.

(For Mountings See Page S-48)

Solid Steel "Whip Type" Graduated Diameter Antennas

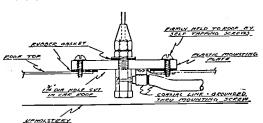
Made of solid steel of extremely high carbon content, heat-treated and oil-tempered to carefully develop physical properties. Rods of varying diameters cold-drawn to rigidly-held tolerances, are joined securely and permanently into a single graduated length Antenna of high flexibility, minimum wind resistance and long life. Available in cadmium-plated with plain $\frac{1}{4}$ " end (Style A) or $\frac{7}{16}$ " threaded stud end complete with hexagon nuts and lock washers (Style B). Also available in stainless steel.

CADMIUM-PLATED STEEL STAINLESS STEEL Length Style A Style B Length Style A Style B AS-172 BC-172 72" BS-172 72" AC-172 78" 78" AC-178 BC-178 AS-178 BS-178 84" 84" AC-184 BC-184 AS-184 BS-184 90" 90" AC-190 BC-190 AS-190 BS-190 96" AC-196 BC-196 96" AS-196 BS-196

(Mountings for Mobile and Police Antennas Shown on Page S-48)

Center

160 Mc. Roof Antenna—1 Man Mount



The most improved, easiest to install Roof Antenna made! One man makes the installation without cutting or ripping car upholstery. Single hole 1%," diameter in metal roof is all that is necessary.

Mounting grounds coaxial sheathing of lead-in line. Rubber gasket insures against leakage. Transparent plastic insulator makes inspection easy. The antenna is stainless steel wire, 18" long with ball-tip and threaded fitting. Suitable for all frequencies in the 152 to 162 megacycle band.

No. DSH-118—Complete Assembly, less transmission line.

No. DS-118-Antenna only.

No. DSJ-118—Antenna with one-hole mounting and porcelain insulator. (Not illustrated.)

Motorcycle Antennas and Mounts

Overcomes weaknesses and defects commonly found in other types! In this Premax, the coaxial line is grounded to same portion of mounting bracket that carries the antenna support itself. Hence no flexing of cable between ground and antenna connection.

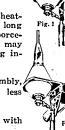
A spring-tension joint permits entire antenna including insulator support and grounded cable to be deflected 90° without injury. Spring tension is sufficient to prevent acci-

dental deflection. Cadmium-plated steel bracket fits ¾" tubing frame in either vertical or horizontal position as shown at

Antenna is high-carbon, Antenna is high-carbon, heat-treated tempered steel 34" long mounted in high-strength porcelain cone insulator. Antenna may be changed without disturbing insulator assembly.

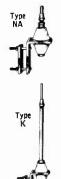
No. CCY-134-Complete Assembly, Antenna and Mounting,

No. CC-134-Antenna only with



PREMAX PRODUCTS, DIVISION OF CHISHOLM-RYDER COMPANY, INC., NIAGARA FALLS, N. Y.

REMAX) Mountings-Insulators-Accessories



TYPE NA Insulated Bumper Mounting. Plates heavily cadmium-plated steel: insulation white glazed ceramic cones. Fits Style A or 14" antenna.

TYPE K Insulated Bumper Mounting. Antenna rod fits into section of heavy brass tubing attached to the insulator and permits 10" adjustment in height of antenna. Nut and compression sleeve lock antenna in place. Fits Style A or 1/4" antenna. White glazed ceramic insu-

TYPE R Insulated Universal Mounting of split-ball type. Solid cast bronze, which bolts directly to car panel or other surface thru heavy plastic disc insulation with waterproof gasket and steel backplate. Baked black enamel finish. Fits Style A or any ¼" antenna.

> TYPE TA Trunk or Panel Mounting, for Premax Style A or any 14" Antenna. Fastens to car body or trunk or to any horizontal surface such as roof. Lower upport is solid brass rog joined to 12" brass tube carrying antenna. Upper support is 24" brass rod adjustable on antenna tube and also in insulator assemblies to fit contour of car. Hightension white-glazed ceramic cone insulators. Maximum 10" antenna adjustment. All metal parts heavily cadmium plated.

TYPE S Insulated Roof Mounting for auto or any flat surface. Special plastic insulation disc carrying heavy tempered steel spring with retaining nut and tapered split bushing to fit Premax Style A or any ¼" antenna. Overall height about 5"; diameter of base about 3". Fittings are solid brass electroplated.

TYPE SA Spring Adaptor Mounting, similar to Type S described above except that a base plug is provided with an adaptor stud to fit any Premax Mounting shown in this column. Fits Premax Type A or any ¼" Antenna. Overall height about 4¾"; base diameter about 1%".



Type 1 Base Insulator; heavyduty with compression rating up to 10,000 lbs. Galvanized malleable iron or bronze. Available in three styles:

RIGID POST TYPES (illustrated)

N.	0.0 .03	, , , , r E 2	(IIII USIII UI EU)	
Galv.	Bronze	Dia. Top	Fits Antennas	
No.	No.	Post	Nos.	
1PG-24	1PB-24	3/4"	318-M	
1PG-25	1PB-25	38"	MM-825	
1PG-26	1PB-26	13"	AL-324	
1PG-30	1PB-30	1000	MM-430, MM-435	
1PG-34	1PB-34	118"	AL-530	
1PG-35	1PB-35	1 3 2 "	M M-635	
1PG-41		132"	AL-535	
1PG-44		1 3/8"	136-M	
1PG-55		123"	AM-035	

HINGED POST TYPES Bronze Dia. Top Fits Antennas Galv. Nos. MM-825 AL-324 MM-430, MM-435 AL-530 1HB-26 1HB-30 1HG-30 AL-530 MM-635 1HG-34 1HB-35 1HG-41 AL-535 1HG-44 1HG-55

*Can be used with adapters to fit all other sizes of masts.

TYPE 1X-SOCKET TOP No. 1-XG

Galvanized
Top tapped standard ¾" 16-thread No. 1-XB Bronze Top tapped standard 34" 16-thread



Type 2 Base Insulator; light design for masts up to 18' or higher if guyed or supported by standoff insulators. ¾" top post but with use of adaptors will fit other size use of adaptors will nt other size masts. Brown-glazed porcelain with galvanized malleable iron top post and base support ce-mented into insulator.

Type 2 No. 2P-24 No. 2P-26 ¾" Top Post Fits 318-M Fits AL-324



Deck Bushing of brown glazed porcelain with galvanized malleable flange which bolts thru rubber gasket to roof or deck.

Bushir	10	Total	Above	Flange
No.	" I.D.	Length	Deck	Diamete
5D-24	8/4"	6"	3"	4"
5D-40 5D-56	11/4"	8"	41/4"	41/2"
5 D-56	13/4"	8½″	$4\frac{1}{2}''$	5 3/8"



Type 6 Base Insulator for platform, rooftops or Marine. Lead-thru construction permits antenna connections below roof or deck. Flanges 6" diameter with stud and bolts for ½" to 3" deck. In galvanized malleable iron or

Type	6		
Galv.	Bronze	Dia. Top	Fits Antennas
No.	No.	Post	Nos.
6PG-24	6PB-24	3/4 "	318-M
6PG-25	6PB-25	35"	MM-825
6PG-26	6PB-26	13"	AL-324
6PG-30	6PB-30	įš″	MM-430, MM-435
6PG-34	6PB-34	116"	AL-530
6PG-35	6PB-35	1 32"	MM-635
6PG-41	6PB-41	1,9"	AL-535
6PG-44	6PB-44	1%"	136-M



Bracket of Wall heavy wall Bracket of neavy formed steel for mounting vertical antennas on side walls, parapets, etc. Drilled to fit Premax Type 1 and 2 Base Insulators, Baked black enamel finish. No. WB-1.



Type 10-S Standoff Insulator, heavy-duty type. Chrome-plated bronze base and headcaps, porcelain insulator. Has solid clamp or hinged clamp for use with hinged-base in-

Solid	ningea		
Clamp	Clamp	Fits Tube	Height to
No.	No.	O.D.	Center
10S-2832	10SH-2832	%" to 1"	about 41/2"
10S-3236	10SH-3236	1 " to 11/8"	about 41/2"
10S-3642	10SH-3642	1\%" to 1\\\"	about 41/2"



Type 3 Standoff Insulator for supporting verticals or for use in pairs as complete antenna or element mounting. Galvanized iron or bronze with porcelain body, 3" in diameter.

Type 3		
Galv.	Brass	Fits Tube
No.	No.	O.D.
3SG-16	3SB-16	1/6"
3SG-20	3SB-20	1/2" 5%" 24"
3SG-24	3SB-24	8%,"
3SG-28	3SB-28	7/8"
3SG-32	3SB-32	î"
3SG-34	3SB-34	1-\."
3SG-40	3SB-40	11/4"
3SG-42	3SB-42	$1_{16}^{'\bar{5}}''$
3SG-48	3SB-48	11/2"
3SG-52	3SB-52	1%"

Type 4 Standoff Insulator is similar to Type 3 excepting it is provided with two ringed clamps instead of the bottom plate. In galvanized iron or bronze in same sizes as the No. 3.



Type 7 Standoff Insulator is a low-priced substantial mounting with wide application. Galvanized malleable frame enclosing white split porcelain bushing. Height 6".

No.												Fits	Tube	O.D.
7S-20													5%"	
7S-24													3/4"	
7S-28													7/8"	
7S-32		٠											1"	



Type 8.C

Type 8-C Insulated Mounting Clamp for horizontal arrays, verticals, etc. Galvanized iron frame with white split porcelain bushing. Width 3½".

No.																				Fite.	Tube	on t	`
8C-20																					56	, 0.1	٠.
00-24																					8/. ^	,	
8C-28						ĺ,	•	•	•	•	•	•	ľ	•	•		•			•	1/2		
8C-32																					78,	,	
_	_	_	_					•		•	•	•	•	٠	•	•	•	٠	•	•	-		



Type 9C Insulated Mounting Clamp for horizontal elements, verticals, etc. Gray iron gal-vanized frame with white por-celain split bushing. Height to center 2".

No.													Tube	O.D.
9C-20		٠		٠	٠		٠						5/8"	
9C-24													3/4"	
9C-28													%"	
9C-32							٠						Ĩ"	



Type 10-C Insulated Mounting Clamp. Stamped steel elec-troplated frame, white por-celain split bushing; light-weight. 2" to center.

Type	L().	C	;													
No.														F	'its	Tube	O.D.
10C-20																%″	
10C-24																3/4	
10C-28																/8 "	
10C-32									,		•					1"	



Wall Bracket PREMAX PRODUCTS, DIVISION OF CHISHOLM-RYDER COMPANY, INC., NIAGARA FALLS, N. Y.





ANTENNAS For FM and Television

- Maximum electrical efficiency for all channel coverage.
- Mechanical design that assures permanent and trouble-free installations.

MINUTE MAN SERIES

Can be assembled by I Man in I Minute! A magnificent new series of antennas designed and developed in the Ward antenna laboratory.

- Vinsynite mast for strength, durability and maximum protection against corrosion. Rotatable guy ring for orientation of antenna after guying. Nylon insulators on high band antenna

Model

TVB-94

54-88 mc.

TELEVISION MODELS

TV STRAIGHT DIPOLE Model

TVB-88 54-88 mc.

A bi-directional antenna ideal for use in metropolitan areas where ghost images are not a problem. Completely assembled.

Contents: 1/2" reinforced aluminum dipole elements - structurally designed molded bakelite insulator -5 ft. 11/4" O.D. Vinsynite mast - universal swivel base - 3 rubber-canvas laminated stand-offs for mast - rotatable guy wire ring—grounding solder lug Technical Data and Instruction Sheets.

Individually packed: six to a master carton. Approximate individual shipping weight: 4 lbs. 12 oz.

TV FOLDED DIPOLE

Broad Band for full coverage of the Low TV Band.

Bi-directional antenna matched to 300-ohm transmission line. For use in metropolitan areas where ghost images are not a problem.

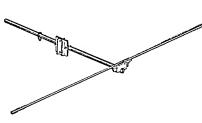
Completely assembled.

Completely assembled.

Contents: ½" reinforced aluminum folded dipole elements—structurally designed molded bakelite insulator—aluminum support casting for center of dipole—5 ft, ½" O.D. Vinsynite mast—universal swivel base—3 rubber-canvas laminated stand-offs on mast—retatable guy wire ring—Technical Data, and Instruction Sheets.

Individually packed; six to a master carton.

Approximate individual shipping weight: 5 lbs. 6 oz. List Price



TV REFLECTOR KIT

For use with Straight or Folded Dipoles.

Used to give additional forward gain, to eliminate ghosts and to discriminate against interference from the back side of the antenna.

Contents: 1/2" reinforced aluminum elements — aluminum element support casting for center of dipole — 11/4" O.D. Vinsynite cross arm — aluminum bracket for attaching cross arm to mast — rubber-canvas laminated stand-offs — Technical Data and Instruction Sheets.

Individually packed: six to a master carton.

Approximate individual shipping weight: 4 lbs. 2 oz.

Model TVRA-92 54-88 mc.

problems.

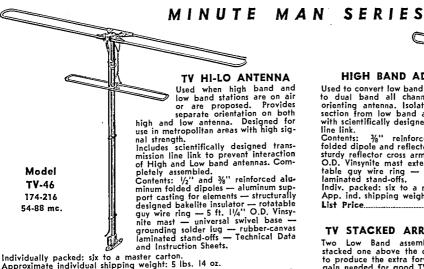
Individually packed: six to a master carton.

Approximate individual shipping weight: 8 lbs. 9 oz.

TV FOLDED DIPOLE WITH REFLECTOR Antenna used in areas of low signal strength for high forward gain or in areas where discrimination against interference from rear of antenna is essential to eliminate ghost or noise problems. Model TV-45 54-88 mc. Reflector and folded dipole complete-ly assembled to cross arm. Only sec-onds required to fasten to mast assembly.
Contents: 1/2" reinforced aluminum folded dipole and reflector elements
— structurally designed bakelite insulator and aluminum support castings for elements — aluminum brackets for attaching cross arm to mast
— 5 ft. 1/4" O.D. Vinsynite metal mast — universal swivel base — rotatabl
guy wire ring — rubber-canvas laminated stand-offs — grounding solder lug Technical Data and Instruction Sheets.

List Price\$15.40

WARD *Magic Wand* Television Antennas



ALL CHANNEL ANTENNA

Designed for use when high band and low band stations are on air or are proposed. Includes scientifically designed transmission line link to prevent interaction of high and low antennas. Eliminates necessity for individual antennas cut for each channel. vidual anrennas cut for each channel.

High and low band bays can be oriented in dependently to receive stations which are not in the same direction. Each bay adjustable in any direction to give maximum desired signal. Contents: %" reinforced aluminum high band folded dipole with reflector and cross arms and ½" O.D. Low band folded dipole with reflector and cross arms — two 5 ft. Il¼" O.D. Vinsynite mast — universal mounting base — rotatable guy wire ring — bakelite insulator — aluminum element support castings — connecting links — Technical Data and Instruction Sheets.

Individually packed: six to a master carton. Approx. individual shipping weight: 12 lbs. List Price. — \$21.00 channel.

ALL CHANNEL STACKED ARRAY

STACKED ARRAY

Combination Low Band stacked folded dipoles and reflectors and High Band stacked folded dipoles and reflectors for complete all channel coverage. Specifically designed for areas on the fringe of both high and low band stations. Half wave bay spacing with phasing link scientifically determined for maximum gain on entire band. Ingenious design allows High Band section to be oriented independently of Low Band section.

Band section to be oriented independently of Low Band section.

Sturdy construction insures permanent installation. Correct 1/2 wave spacing proven by extensive tests to achieve greater forward gain than ordinary stacked arrays. Eliminates signals from the rear for maximum ghost rejection. Broad banded for maximum pick up on all channels. Use of folded dipoles in scientifically designed arrangement to provide broad response and maximum energy transfer.

Completely Pre-Assembled.
Contents: Two 3/8" reinforced aluminum high band assemblies and two 1/2" reinforced aluminum low band assemblies — rotatable guy wire rings — rubber-canvas laminated standoffs pads — grounding solder lug — all angle self-supporting mounting base — Technical Data and Instruction Sheets.

Individually packed: six to a master carton.

Approximate individual shipping weight: 21 lbs. 12 oz.

List Price — \$49.50

HIGH BAND ADAPTER

Used to convert low band folded dipole to dual band all channel separately orienting antenna. Isolates high band section from low band and vice-versa with scientifically designed transmission line link.

line link.

Contents: 36" reinforced aluminum folded dipole and reflector elements — sturdy reflector cross arm — 5 ft. 11/4"

O.D. Vinsynite mast extension — rotatable guy wire ring — rubber-canvas laminated stand-offs.

Indiv. packed: six to a master carton.

App. ind. shipping weight: 4 lbs. 2 oz.

List Price. — S8 95.

List Price...

TV STACKED ARRAY

Two Low Band assemblies stacked one above the other to produce the extra forward gain needed for good TV re-ception in remote installations and poor signal loca-

Half wave bay spacing with phasing link scientifically de-termined for maximum gain on entire band. Broad Banded to give full coverage on channels 2

Broad Banded to give tull coverage on channels 2 through 6. Sturdy design and extrastrong construction assures permanently secure mounting in any weather — correct ½ wave spacing proven by extensive tests to achieve great-

wave spacing proven by extensive tests to achieve greater forward gain, much more than with the ½s or ¼ wave spacing of ordinary "stacked arrays"— elimination of signals from the rear for maximum ghost rejection—use of folded dipoles in scientifically designed arrangement to provide broad response and maximum energy transfer. Completely Pre-Assembled.
Contents: Two ½" reinforced corrosion-proof folded dipole and reflector assemblies—15 ft. 11¼" O.D. Vinsynite mast in three sections—all angle self-supporting mounting base—reinforced aluminum telescopic feeder tubes connecting the two bays—rotatable guy wire rings—rubber-canvas laminated stand-offs—grounding solder lug—Technical Data and Instruction Sheets.

Angers.
Individually packed: six to a master carton.
Approximate individual shipping weight: 20 lbs. 4 oz.
List Price.....

TY HIGH BAND STACKED ARRAY

High Band Stacked folded dipole. Can be used as a stacked high band antenna by itself or as adapter to convert low band stacked array to all channel stacked array. Half wave bay spacing with phasing link scientifically determined for maxi-

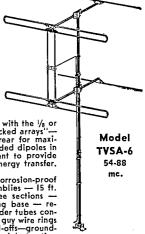
termined for maxi-mum gain on entire band.

Superb antenna for use in fringe areas having high band stations. Contents: Two 3/6" reinforced aluminum

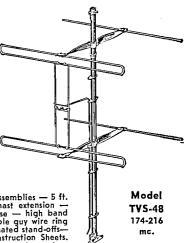
reinforced aluminum high band folded dipole and reflector assemblies — 5 ft. II/4. O.D. Vinsynite mast extension — universal mounting base — high band phasing link — rotatable quy wire ring — rubber-canvas laminated stand-offs— Technical Data and Instruction Sheets. Individ. packed: six to a master carton. Approximate individual shipping weight: 5 lbs. 2 oz. List Price.

Model

TVB-28 174-216



\$42.50



.....\$13.50

List Price

Model

TVHA-9 54-88 174-216 mc.

WARD Magic Wand INDOOR TV ANTENNAS



MODEL TVI-43

The TVI-43 is the finest indoor antenna modern skill and technology can produce — far superior by any standard than anything else on the market. Brings in all channels precisely and brilliantly. Beautifully designed in satin beige brown finish — blends perfectly with the most exacting interior. Contents: 2½ ft. metal mast — heavy base. Two 45" telescopic tuneable elements of chrome-plated brass tubing — 12 ft. colinear transmission line, Instruction sheet. Individually packed: six to a master carton. Approx. individual shipping weight: 9 lbs.

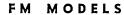
MODEL TVI-49

Excellent reception on all channels. Top quality electric insulation. Orients easily in all directions. Heavy base with large surface for mechanical stability. WILL NOT TIP OYER. Telescopic dipole ele-

The contents: Ebony black ceramic base — Two 43" tuneable elements of chrome-plated brass tubing — Stainless steel rod allows no corrosion. Ind. packed: six to a master carton. App. in. shipping wt.: 5 lbs. List Price \$6.95



WARD Magic Wand FM ANTENNAS





FM FOLDED DIPOLE

List Price.....

Bi-directional.

List Price Model FM-55 88-108 mc.

FM FOLDED TURNSTILE

Exceptional high signal gain from All DIRECTIONS.

Exceptional high signer.

All DIRECTIONS.

Does not require orienting.

Packed complete, partially Pre-Assembled components for quick and simple installation.

Contents: 3/6" reinforced aluminum folded dipole elements — 5 ft. 1" O.D. mast — molded bakelite insulators — 60 ft. 300-ohm colinear line and 1/4 wave length phasing loop—rubber stand-off pads — 6 plastic stand-offs, guy wire ring and conduit clamp — grounding solder lug — Technical Data and Instruction Sheets. Individually packed: six to a master carton. Approx. individ. shipping weight: 8 lbs.

List Price.

Madel FMT-56

Model FMT-56 88-108 mc.





TELEVISION AND FM ACCESSORIES



MAST EXTENSION
Model MEA-60 — For use with Television Models

Five-Foot Vinsynite mast extension to increase height of vertical mast and raise antenna into area of greater signal strength. Should be used also to comply with local codes in keeping antenna above required height. — Contents: 5 ft. 11/4" O.D. Vinsynite mast—weather-proofed inside and out—guy wire ring—rubber-canvas laminated stand-offs. — Individually packed: six to a master carton. — Approx. shipping weight: 16 lbs. 4 oz. List Price \$3.25\$

MODEL ME-60 MAST EXTENSION FOR USE WITH FM MODELS

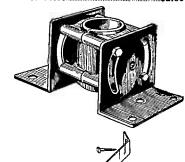
5 ft. 1" O.D. Mast Extension weather-proofed inside and out — rubber stand-off pads — guy wire ring — Packed: six to a master carton Approximate shipping weight: 121/2 lbs.



PLASTIC STAND-OFFS Model SO-144

SELF-SUPPORTING BASE Model C-14

rodel C-11:
For use with 1" O.D. Mast.
List Price \$0.00
Ind. boxed. — App. ind. shipping
weight: 1 lb. 7 oz.



LEAD AND INSULATOR KIT

Model C-15
Contains 60 ft. 300-ohm line with terminals — 6
plastic stand-off insulators — 6 wood screws.
Individually packed: six to a master carton.
Approximate individual shipping weight: 14 oz.



COLINEAR TRANSMISSION LINE Parallel line of 300-ohm impedance insulated with polyethylene for highest quality FM and TV recep-tion. For easy installation, Jine comes on handy

MAST STAND-OFF BRACKET KIT

Two pairs of heavy, cadmium-plated steel stand-off brackets, for 11/4"
O.D., to extend mast from side of house or parapet for clearance of 7"
or larger size for clearance of 14". Complete with all necessary
mounting hardware.

Model C-16 — For 7" clearance.

Individually packed: 6 kits to a master carton.

Model C-17 — For 14" clearance.

Individually packed: 6 kits to a master carton.



by WARD

BUILT FOR RIGOROUS SERVICE

MOUNTS SWIVEL UNIVERSAL

Antennas built for the hardest mobile use. Separate components may be combined to meet any requirements. These rear-mounting Transmitting Antennas are designed for the 25-45 mc. services. Base mounts in such a way as to allow the whip rod to be held vertically regardless of contour of vehicle body. SPP.3

← SPP-3R

SINGLE ROD

Special Alloy Whip Rod of maximum resilience and durability. 84" Single rod for use in the range of 30 to 45 mcs. Non-Corroding, stainless steel tapered for proper stress distribution. Base Adapter threaded 3/2-24 to permit mounting on SPP-3 Base or SPP-3A Spring.

Individually packed. Approx. weight: 2 lbs.

SPP-12 →

ADJUSTABLE 2-SECTION ROD

Adjustable Rod. Telescopes from 85" to Adjustable Kod. lelescopes from 85" to 103" and is equipped with a locking device that permits removal of the whip rod and replacement at the exact previous length. Heavy wall, hard drawn brass tubing — threaded 36:24 to fit either SPP-3 Base or CBP 36 Extra Cap CBP 36 CBP 36 E SPP-3A Spring. See SPP-3B for Rod descrip-

Ind. packed. Approx. weight: 2 lbs. 10 oz. List Price

Swivel base for mounting at any desired point. Half balls of cast aluminum tapped 36-24 to accept whip rods and shock springs. Insulator of black bakelite — rubber gaskets — steel backup plate, All screws are Allen Head type with wrenches supplied.

SWIVEL BASE

Individually packed. Approx. weight: 3 lbs. 4 oz.



SPP-3A

SHOCK MOUNTING SPRING

This sturdy spring is used to lessen damage to the whip rod. A flexible lead through the center of the spring maintains constant electrical impedance through the spring assembly. %-24 stud on one end — ½-24 tapped hole on opposite end — approximately 6" in height — made of oil tempered wire.

Individually packed. Approx. weight: 21bs. 12 oz.





FENDER MOUNTS

Disappearing type antenna - For Transmitting and Receiving — Designed for rigorous service of Emergency Communications. Non-telescopic construction exactly duplicates standard automotive models in appearance -- gives perfect disguise for detective or patrol service. Antenna mounts in fender or cowl - removable whip for quick service or installation.



55" permanent whip eliminates contact troubles . . . Lead take-off accepts standard AN connector. For low or high band services. Used as short 1/4 wave vertical for 25-44 mc. service . . . "J" for 152-162 mc. service. The universal split ball design insures a perfect fit as well as that neat built-in appearance and easy installation. Lead not included.

Model SPP-71 Individually packed. Approximate weight: 1 lb. 12 oz.

\$22.50

MOTORCYCLE MOUNTS

These Antennas are designed for use on motorcycles and are built to withstand the rugged service and high vibration of vehicle. Rod is electrically short but can be used on all frequencies. 40" rod of same material as SPP-3B — 1/4-20 mounting stud in insulator for mounting to motorcycle. Flexible base of rubber to allow movement when rod is bent - Model SPP-6 with safety ring tip -Model SPP-6A with stainless steel ball tip - no lead supplied. Individually packed. Approx. weight: 1 lb.

Model SPP-6 Ring Tip (Illustrated) List, \$9.25 Model SPP-6A Ball Tip (Not Shown) List, \$9.25



Developed for roof top mountings in 30 to 45 Megacycle range. Advantages of this type of antenna is that directional effects caused by car body shielding of antenna are avoided. Base is designed to be used with the SPP-3B rod which is sold separately. This unit consists of all components of Universal Swivel Mounts except that half-balls are replaced by SPP-3A Spring fastened permanently to insulator. No lead supplied.

Individually packed. Approximate weight: 3 lbs.

Model SPP-26 Base_____List, \$16.50

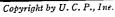
ROOF TOP ANTENNA

This model is designed for taxicabs, police services, and others using the 140 to 165 Megacycles frequencies. Installed entirely from the outside of vehicle - 12 ft. length of RG-58/U coaxial cable attached permanently to antenna. Whip rod is replaceable.

Individually packed. Approximate weight: I lb. List, \$6.60 Model SPP-18









Worlds Tines

- ✓ SIMPLIFIED ONE-MAN INSTALLATION.
- UNIVERSAL DESIGNS TO FIT EVERY CAR.
- ✓ RUGGED, LASTING CONSTRUCTION with -
 - · Heavy wall brass tubing
 - Weather-resistant triple chrome
- ✓ GREATEST SIGNAL PICKUP with —

 High "Q" low-loss lead cables

 - Positive coaxial connections
 - 100% shielding
- ✓ PATENTED FLUID TYPE ANTI-RATTLE.
- ✓ HEAVY CARTONS READY FOR RESHIP-MENT.

SIDE COWL MOUNTS

Two stanchions for sturdy installation. Smartly designed insulators with chrome caps. Conversion kit for torpedo bodies included.

LONG RANGER

Four-section, 100-inch, EZ-on installation. A favorite in low Signal areas where its extra length provides fine reception.

Individually packed: 12 to a master carton. Approximate individual shipping weight: 1 lb. 11 oz.List Price, \$6.95

AIR KING

Three-section, 66-inch, EZ-on installation. Individually packed: 12 to a master carton. Approximate individual shipping weight: | lb. 4 oz. Model SC-6.....List Price, \$4.95

SIDE COWL OR FENDER FLEX-ANGLE

Three-section, 68-inch, EZ-on installation.

Individually packed: 12 to a master carton. Approx, individual shipping weight: I lb. 8 oz.

Model CF-6.....List Price, \$5.45

Tops in popularity because of trim styling and a flexible adjustment so rod can be locked in a vertical position, regardless of body contour. Ideal design for new body styles.



TOP COWL OR FENDER "8-BALL"

Featuring the SPLIT BALL DESIGN



Three-section, 56-inch, collapses to 22 inches. Individually packed: 12 to a master carton.

Approximate individual shipping weight: I lb. Model TCF-3....List Price, \$5.35

Smart looking "8-Ball" design developed and engineered by WARD is the answer to every installer's dream. One man installs in five minutes! Secure installation! Perfect fit on every carl



DISAPPEARING COWL OR FENDER IMPERIAL

Four-section, 100-inch, 8-9/16" exposed when collapsed.

Individ. packed: 12 to a master carton. App. ind. shipping weight: 1 lb. 10 oz. Model DCF-4...List Price, \$10.95

A disappearing antenna — 100% shielded from engine noises and completely water-sealed. Unique spilt-ball design plus popular disappearing feature gives that smart built-in appearance. Universal bracket for sturdy mounting. Ward 36" coaxial lead cable.



PHANTOM

Three-section, 56-inch, 3½" exposed when collapsed.
Ward 36" coaxial lead cable.

Individ, packed: 12 to a master carton. Approx. ind. shipping weight: 1 lb. Model DCF-3.... List Prict \$6.95



EACH MODEL COMPLETE WITH A WARD COAXIAL LEAD CABLE



Made of the finest insulating materials - Polyethylene, wire shield braid, oil and abrasion-proof vinylite.

WARD's exclusive lead connector fitting provides an easy coaxial connection, 100% shielded. Bayonet adapter for pin plug included so lead will fit every car radio.



Model C-8 (12 in.) List, \$0.75 Model C-9 (18 in.) List, \$1.00 Provides additional lead length required for fender installation.

Covered by one or more of the following Patent Numbers: 104968, 119160, 2152316, 2251889, 2252671, 2269947, 2366634.

SPOT LITE WARD AUTO AERIALS

WITH THIS NEW ATTRACTIVE 3-COLOR DISPLAY -

FREE!

Featuring the "8-Ball" TCF-3 aerial and beautifully designed in 3 colors — yelow, orange and black. This display will catch the eye of every customer.

Display is FREE!

Just mount an "8-Ball" TCF-3 and set it up on the counter and watch your aerial sales grow.



Model CD-1

A WARD Development to fit every antenna need!

WARD ANTENNAS FOR THE HOME

Are vertical, the same as broadcasting antennas, for greatest signal pick-up, finest reception

HOUSE MAST

4-SECTION, 12-FOOT, COLLAPSIBLE TO 47 INCHES.

FEATURES . . . Easy installation, Universal mounting brackets, Heavy weatherproof cadmium plating, Built-in lightning arrestor.

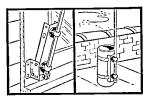
Model HM-4....List, \$7.45

Ind. packed - 12 to the master carton. Approx. ind. shipping wt. 4 lbs.

> Complete Installation Fittings Included



60' Lead Wire - Ground Clamp Wood Screws — 2 Nail-It-Knobs — 1 Porcelain Tube — 1 Lead-in Strap — 2 Soil Pipe Straps.



WINDOW FRAME

SOIL PIPE

WINDOW SILL INSTALLATION

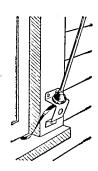
WINDOW MAST

3-SECTION, 8-FOOT, COLLAPSIBLE TO 42 INCHES.

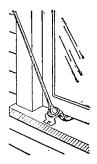
FEATURES . . . Simple 3-point, 3-minute installation for apartments, homes, office buildings, Twoway mounting bracket, 12-inch lead-in strap, and heavy, weatherproof cadmium plating.

Model WM-3.....List, \$3.25

Individually packed — 12 to a master carton. Approx. ind. shipping weight — 1 lb. 2 oz.



WINDOW FRAME INSTALLATION



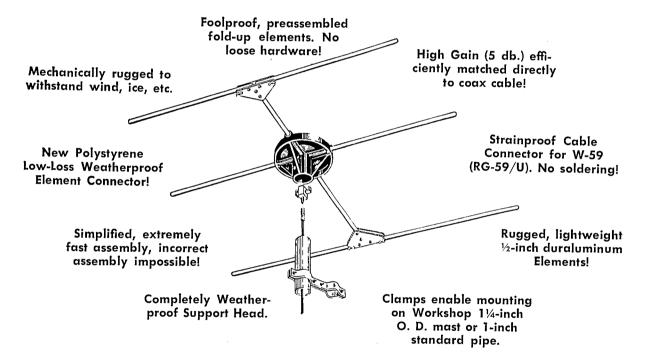
WORKSHOP TELEVISION ANTENNAS and ACCESSORY EQUIPMENT

The Workshop line for '49 has been redesigned to produce even better pictures at lower cost. Three-element arrays, designed for specific channels and combined on a single mast for particular areas, have been pioneered by the Workshop with outstanding success—even to the point of nation-wide imitation during 1948.

SERIES A-BASIC THREE ELEMENT ANTENNA

This is a high-gain (5 db.) directional antenna having sufficient broad band response to cover the 6 mc. channel for

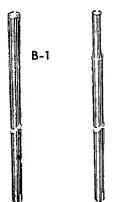
which it is engineered. It is the basic unit of all Workshop multi-channel systems. Note the following desirable features—



Basic 3-Element High Gain Antenna with Mounting Clamps for 11/4" O.D. or 1" Standard Pipe Mast

	s—List Price \$21.00 Veight 6 lbs.		s— List Price \$17.00 Weight 5 lbs.				
Model	For Channel	Model	For Channel				
A-2	2*, 3	A-7	7*, 8				
A-3	2, 3*. 4	A-8	7, 8*,9				
\-4	3, 4*, 5	A-9	8, 9*, 10				
A-5	5*,6	A-10	9, 10*, 11				
A-6	5, 6*	A-11	10, 11*, 12				
	[A-12	11, 12*, 13				
ptimum Channel]	A-13	12, 13*				

WORKSHOP SERIES B-MAST SECTIONS



MODEL B-1 Top Mast Section

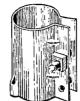
A sturdy 11/4 inch O.D. mast of heavy gauge seamless steel tubing, four feet long. Gray enameled. Holes provided at top for mounting three-element-basic antenna. Slot at bottom aids self-tapping screw to hold mast extension de-B-2 scribed below. Net weight each, 2 lbs.

List Price \$2.50

MODEL B-2 Mast Extension

A swedged 11/4-inch O. D. scamless steel mast tube that will fit into B-1 mast listed above or bottom of another B-2 to extend overall height by approximately four feet. Gray enam-eled. Net weight each 2 lbs.

List Price \$2.75

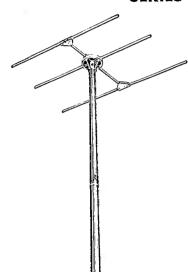


MODEL G-3 Guy Wire Fixture

This fixture can be placed on 11/4-inch O. D. or 1-inch standard pipe mast and tightly clamped in place so that three guy wires can be attached to aid in supporting mast equipment.

List Price \$0.50

SERIES AB-BASIC ANTENNA WITH MAST



This series consists of a basic highgain, Series A, three-element antenna described on page S-55 plus a 71/2-foot mast (B-1 and B-2 mast sections). Appropriate mounts can be selected from those described under Series C. Clamps for 11/4-inch O. D. mast or 1inch standard pipe are also furnished. If and when new TV stations start operation in your area, this combination may be readily converted to a multi-channel system by the simple addition of Series A antennas and Model B-2 mast extensions. Series AB antenna with mast should be selected from the list below for the channel on which reception is desired. This series is furnished less transmission line and mounts.

Basic 3-El	ement High Gain	Antenna with 7½	2-foot Mast			
	List Price \$26.25 Veight 12 lbs.	High Band M o dels Shipping W	List Price \$22.25 eight 10 lbs.			
Model	Channel	Model	Channel			
AB-2	2*, 3	AB-7	7*, 8			
AB-3	2, 3*, 4	AB-8	7, 8*,9			
AB-4	3, 4*, 5	AB-9	8, 9*, 10			
AB-5	5*,6	AB-10	9, 10*, 11			
AB-6	5, 6*	AB-11	10, 11*, 12			
		AB-12	11, 12*, 13			
		AB-13	12, 13*			

SERIES C-MOUNTING EQUIPMENT



Conventional Chimney Mount

An excellent support for antennas with mast equipment that can be mounted on chimneys, posts, and other irregular objects. Made of heavy gauge steel and heavily plated to resist rust. Separation between clamps is variable. Masts from 1 to 2 inches O. D. can be used. Preassembled parts cut installation time. Shipping weight 5 lbs.

List Price \$6.50

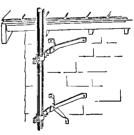
Extra 10 feet of strapping, Model ST-1. List Price \$0.75



MODEL C-2, Revolutionary New "Minute Mount" for Internal Chimney Mounting

This ingenious "Minute Mount" can be installed a short way inside a chimney. Completely adjustable for all chimney flues—tile lined or brick. Will not interfere with operation of chimney. Made of heavy cast alloy capable of supporting 150 lbs. with a generous safety factor. Mast 3/4-11/2 inches O. D. and antennas can be oriented while mount is in position. Built-in strain guide prevents chafing of cable against chimney. Shipping weight 2 lbs. List Price \$

\$8.95

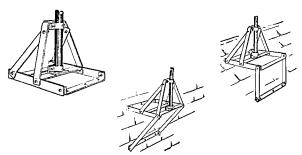


MODEL C-3, Wall Brackets

These rugged braced steel brackets, heavily plated, will furnish a 121/2inch clearance for mast equipment that must be supported adjacent to siding or wall. Will hold masts from 1 to 2 inches in diameter. Furnished with wood screws. Packed 2 to a carton. Shipping weight 3 lbs.

> List Price \$5.50

WORKSHOP SERIES C — MOUNTING EQUIPMENT (Con.)



MODEL C-4, Universal Base Mount

For installations requiring a truly sturdy braced mount none can compare with the stability of this universal mount. Made of heavy steel protectively plated to resist rust. This versatile mount has an 11 x 12-inch base. The mast is clamped at two places 9½ inches apart and can range from 1 to 1½ inch in diameter. Its durable and ingenious mounting features will allow mounting relatively heavy antennas and masts on flat, peaked, or inclined roofs, even walls with a 10-inch clearance. Complete with hardware and instructions. Individually packaged. Shipping weight 6½ lbs.

List Price \$11.00

SERIES 2A — SUPER HIGH-GAIN SIX-ELEMENT ARRAY

This six-element array consists of two basic three-element antennas spaced a ½-wave apart and connected by a preassembled cable harness as an efficient "broadside array." The forward gain is 7.8 db. compared to the conventional ½-wave dipole and will produce a signal approximately six times as strong in power. The array is essentially single channel with an adjacent channel gain of 5 db. The high front-to-back ratio of 18 db. signifies that the possible response of an interfering co-channel signal arriving from behind the array would be 2% of that picked up from the front.

The sharp directional pattern combined with the advantages of shielded coaxial transmission line, means that the signal-to-noise ratio is considerably greater, and "snow effect" less, than that of other so-called fringe area antennas. In addition, "ghosting" is discouraged, even in city areas where multi-path reflections are numerous.

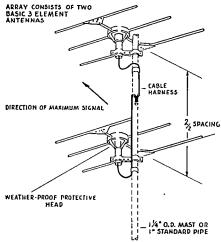
W-8, 52-ohm coaxial cable should be used as transmission line with this array. If a direct connection between the

cable and receiver is not practicable, impedancewise, a W-100 adaptor together with a T-72 matching transformer and fittings may be necessary.

No mast equipment is supplied with this antenna yet mounting is extremely simple, since the clamp brackets furnished fit any 1½-inch O. D. mast or 1-inch standard pipe. This feature along with "foolproof" assembly of the 2A antennas make installation very simple.

Preassembled Cable Harness Only

The installer can readily convert his present Series A, three-element antenna to a Series 2A, super high-gain, six-element array by adding another corresponding Series A antenna plus a cable harness. The performance of a high band (Channels 7 through 13) six-element Series 2A array can be further enhanced by stacking another Series 2A plus one more cable harness to make a very super high-gain twelve-element array. Details of these arrays are furnished with every Series 2A antenna.



		1/4° C	LD. MAST OR HIDARD PIPE
Sup	er High Gain	6-Element	Array
List Pric	nd Models se \$52.00 /eight 11 lbs.	List Pric	nd Models e \$43.50 /eight 8 lbs.
Model	Channel	Model	Channel
2A-2	2	2A-7	7
2A-3 2A-4	3	2A-8 2A-9	8

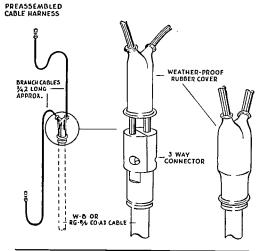
2A-10

2A-11

2A-12

2A-13

5



Cable Harness Only—For Making 6- and 12-Element Arrays				
Low Band Models \$10.00		High Band Models \$9.50		
Model	Channel	Model	Channel	
CH-2	2	CH-7	7	
∙ CH-3	3	CH-8	8	
CH-4	4	CH-9	9	
CH-5	5	CH-10	10	
CH-6	6	CH-11	11	
		CH-12	12	
		CH-13	13	

2A-5

2A-6

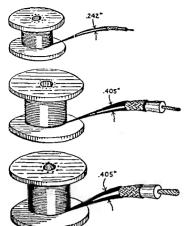
10

11

12

13

COAXIAL CABLE TRANSMISSION LINE



W-59 Standard 72 Ohm Coaxial Cable

Electrical and physical characteristics are the same as RG-59/U. Recommended as the ideal cable for installations not requiring more than 75 feet, directly matches Series A basic threeelement antennas. Neutral colored (weather-proof) jacket with convenient marks indicating 5-foot intervals. Supplied in 500-foot reels, weighing 22 lbs.

List Price \$0.10/ft.

Very Low Loss 72 Ohm Coaxial Cable

Recommended for Series A three-element antennas when transmission line in excess of 75 feet is needed. Electrical and physical characteristics same as RG-11/U. Weatherproof. Supplied in 500-foot reels. Shipping weight 55 lbs. List Price \$0.30/ft.

Very Low Loss 52 Ohm Coaxial Cable W-8

Electrical and physical characteristics same as RG-8/U. Recommended for transmission line with Series 2A six-

element arrays. Weatherproof. Supplied in 500-foot reels. Shipping weight 60 lbs. List Price \$0.33/ft.

SOLDERLESS CABLE FITTINGS

Silver Plated Solderless Cable Connector (Male)

W-50



Used with W-59 (RG-59/U) coaxial cable. Specially slotted to withstand considerable strain. Mates with W-60 receptacle (on R-4A switch) and W-80 junction listed below. Individually packaged and plainly marked.

List Price \$0.60

Silver Plated Cable or Panel Junction (Female)

Model W-80 Cilii (Ciliii) iii iiii iiii iiii

Mates at either end with W-50 male connector. A complete splice requires one W-80 junction and two W-50 connectors which must be ordered separately. Each W-80 individully packaged and plainly marked.

List Price \$1.00

Silver Plated Chassis Receptacle (Female)

Model W-60



Mates with W-50 cable connector. For chassis or panel mounting. Threaded stem 5/8 inch long. Soldering terminal protrudes from rear. Individually packaged and plainly marked.

List Price \$0.80

🖔 Cable Adaptor Model



W-100

Required when changing from larger size W-11 (RG-11/U) or W-8 (RG-8/U) to smaller W-59 coaxial (RG-59/U)cables. No soldering necessary. W-50 cable connector furnished. Individually packaged and plainly marked.

List Price \$2,50

ACCESSORIES



Matching Transformer Matches 72 ohm coaxial cable such as Work-

shop W-59 (RG-59/U) to 300 ohm receivers. Voltage step up of 2 : 1, with a flat response over the TV channels from 52-216 mos. A W-50 solderless cable connector is furnished. Size 2 inches long, 1-inch diameter. Strap provided for grounding and

mounting container on receiver chassis. Negligible mismatch when used with W-8 52-ohm coaxial cable and W-100 adaptor. Individually packaged. List Price \$4.00



Model R-4A

New Coaxial Switch (SP4T)

This virtually lossless, constant impedance switch will connect any one of four singlechannel TV antennas to a receiver. By simply using additional switches it can also he used for demonstrating any number of TV receivers in a display room, or for low-level audio applications.

Receptacle fittings mate with W-50 solderless connectors for W-59 cable and must be ordered separately. Decals are supplied for panel marking of TV channels. Only one 7/16-inch hole need be drilled for panel mounting. Size-2% inches front to back; 2-inch diameter. Individually boxed. List Price \$12.00



Model Exterior Matching Transformer

Completely weatherproof device for converting 72 ohn antennas for use with inexpensive 300 ohm Twin Lead transmission line at reasonable efficiency. Can also benefits of 72 ohm coaxial cable. Individue used with 300 ohm antennas to realize ally packed.

List Price \$3.50

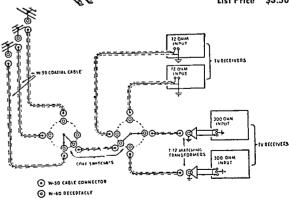


Diagram of a typical display system employing the R-4A coaxial switch and T-72 matching transformer.

THE WORKSHOP ASSOCIATES, INC.

Specialists in High Frequency Antennas



Radiart "Simpli-Flex TELE

X ELEVISION



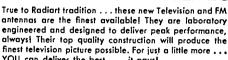
No "assembly puzzles" with Rodiort's "SIMPLI-FLEX" design. No degree in engineering or truck-lood of tools needed — absolutely no loose hardware. One minute assembly, one man installation!



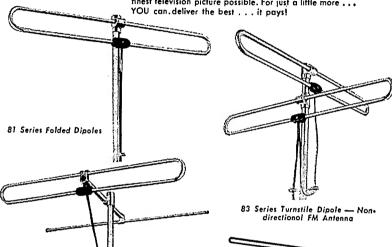
High strength, well engineered design of more than ample safety foctor, with simple, sturdy all oluminum castings, elements, and heat-treated support mosts for PERMANENT installations.



"WEATHER - SHIELD" polystyrene terminol block encloses lead-in connections and protects from all weather conditions! Keeps electrical performance of maximum.



and



82 Series Folded Dipoles ond Reflectors

LIST PRICE SCHEDULE

		LIST P	RICE SC	HEDULE			\
TV and	FM ANTEN	NAS	1	ACCESSORIES		•	1.0
Model	Range, MC	List	Part #	Description	List	Od Cartes Dankla	1k
TBI-LTY	54-88	\$14.95	AMT-56-1	4 ft. Mast, I1/8" OD, plug-în		84 Series Double Stocked Atrays	AI A
81-LTV	54-88	12.45		type 8 ft. Mast, 11/8" OD, plug-in	\$ 3,25	Stocked Allays	/IL3
TBI-HTV	174-216	13.50	AMT-62-1	8 ft. Mast, 11/8" OD, plug-in			/ II \
81-HTV	174-216	11.00		type 12 ft. Mast, 11/8" OD, plug-in	5.75	i	11(1
TBI-FM	88-108	14.25 11.75	AMT-62-2	12 ft. Mast, 11/8" OD, plug-in		1	H Y
BI-FM	88-108	11.75		type	8.25	1	11 1
T82-LTV	54-88	20.95	A K-26	type Mounting straps, dble. set	2.50		Bi V
82-LTV	54-88	18.45	AK-27	Universal mounting brackets,			
T82-HTV	174-216	19.00	·	set of two, howre	5.00		
82-HTV	174-216	16.50	AK-30	Hvy, swivel mtng, base	2.00		41
T83-FM	88-108	19.50	AK-31	Std. swivel base	1.00		41/
_83-FM	88-108	17.00	AMX-122	Stand-off insulator, wood			
T84-LTV	54-88 54-88	42.50		screw type, polythene grom-			11.6
84-LTV	54-88	40.00		met	.15		•••
T84-HTV	174-216	27.00	ASA-230	met Stand-off insulator, machine			
84-HTV	174-216	24.50		screw type, 4½" long, #10-		Comment of the commen	
T85-ATV	54-216	30.50		32 thrd.	.20	Control of the Contro	
85-ATV	54-216	28.00	ATX-7	300-Ohm Trans. Line, per M	38.00		_
85-X	54-216	23.00	ALW-87	75 ft. coil 300-ohm line, 2		719-	
T85-X	54-216	25.50		solder lugs attached	3.00		
T85-XAX	54-216	45.00		ANTENNA PARTS			
85-XAX	54-216	42.50	AK-32	"Weather-Shield" Terminal			
AD.	APTOR KITS			Block, Polystrene, for flat			
81-RL	54-88	\$6.75		300 ohm line, set	1.00		
81-RFM	88-108	6.45	AK-33	"Weather-Shield" Terminal		₩ i	
81-RH	174-216	6.00		Block, Polystrene, for RG-59U			
81-TK	88-108	5.75		Cable	1.25		
	_		A\$A-232	Large main aluminum cast-		1 1/	THE RESERVE TO SERVE
	ON" ARRAYS	•		ing, with screws Small aluminum casting, with	1.50]	
K82-HTV	174-216	\$8.00	A\$A-229	Small aluminum casting, with			
K82-LTV	54-88	10.00		screws	1.25	11	
K84-HTY	174-216	8.00	AMX-125	Barrier type junction block,		ſ II	
K84-LTV	54-88	10.00		for stacked arrays	.50		85 Series Hi-Lo
						A	II Channel Array

THE RADIART CORPORATION

MANUFACTURERS OF THE FAMOUS RED SEAL VIBRATORS

RADIART



1949

AERIALS

UNIVERSAL LOK-JOINT

This new design has eliminated the last "bug" in this style aerial. Locks easily and positively in any pre-set position without swinging the mast when tightened; ½" mounting hole.

MODEL U-3

CHEVROLET & GM
ADAPTOR KIT Included



– Features –

- replace most factory equipped aerials.
- easy one man installation.
- brilliant "SUPER-CHROME" plating.
- · small mounting holes.
- highest quality heavy wall brass tubing.
- stainless steel top rod.
- · absolutely waterproof.
- DeLuxe 48" interchangeable lead-ins fit all models.



DISAPPEARING MOUNT

This newest addition to the Radiart line collapses to 6'' and extends to 60''. Fits fender or cowl and features the exclusive "O" Ring Seal around the mast that shuts the door to water entry inside the aerial. Only one $\frac{9}{16}''$ mounting hole required,

MODEL D-3

60" Extended 3-Sections. Shipping Wt. 2 lbs.

TWO-INSULATOR SIDE MOUNT

The old reliable with the "New Look"! Chrome trimmed stanchions on the well known sturdy side cowl antenna that requires only ½" holes for installation. Wedge type adaptor furnished.

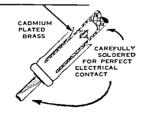
MODEL S-3

MODEL S-4 DELUXE

LEAD-IN



WIPING SPRING FINGERS



SWING ANGLE SIDE MOUNT

For side of cowl or fender — with 16° swing adjustment — locked PERMANENTLY with hex nut at mast base. Chrome trimmed "Tear Drop" styled insulator mounting through one 1/2" hole.

MODEL A-3

63" Extended 3-Sections. Shipping Wt. 1 lb. 2 oz.

LIST......**\$5.95**10 per master car-

ton....14 lbs. 3 oz.





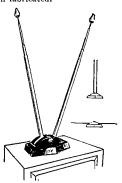
THE RADIART CORPORATION

MANUFACTURERS OF THE FAMOUS RED SEAL VIBRATORS

TELEVISION-FM ANTENNAS — ACCESSORIES

Latest Design

An entirely new and complete line of Television and FM antennas and accessories—precision made by ICA, pioneers in Television for over twenty years. Precision engineered; precision fabricated.



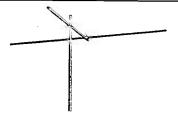
THE "SUPER-WASP"
NEWI IMPROVED! SENSATIONAL!
The new INDOOR Television Antenna with amazing reception qualities. Instantaneous horizontal-vertical orienting and tuning for maximum reception. All-Channel selection. Beautifully designed golden-tone brass dipoles and bakelite walnut base with non-scratch cushions. Jiffy installation. Also improves reception when used to supplement existing outdoor antennas. outdoor antennas. No. 6468—With 300 ohm lead

List \$6.95



HI-BAND ANTENNA

HI-BAND ANTENNA
Adds to the performance of existing television installations. Broadens reception range of low band antennas to include the higher channels (7 to 13). May be independently rotated for maximum directional response. Matching feature results in more even reception from channel to channel. All metal; weather-resistant. Includes 300 ohm connecting lead.
No. 6440—Ship. Wt. 2½ lbs. List \$6.45

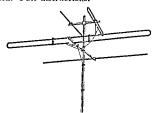


 $\begin{array}{c} \textbf{REFLECTOR} \\ \textbf{Add} \ \ \textbf{to} \ \ \textbf{existing} \ \ \textbf{folded} \ \ \textbf{or} \ \ \textbf{simple} \ \ \textbf{dipole} \ \ \textbf{for} \end{array}$ stronger pick-up.
Improves response; cuts down interference.
May be added to ICA No. 6420.
No. 6425—Ship. Wt. 3 lbs.......List \$4.45

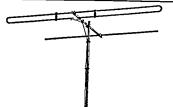
FM RECEPTION
Improves directional strength of FM reception in low signal areas. Eliminates reflections. May be added to No. 6406.
No. 6410—Ship. Wt. 2½ lbs......List \$4.45

Latest Features

Includes sturdy, rust-proof, all-metal construc-tion; non-corrosive aluminum dipoles, inde-pendently rotable elements. Offers broad-band reception. Easy-fitting units for "jiffy" instal-lation. Full instructions.



HI-BAND LO-BAND TV ANTENNA
For outstanding reception over the entire television channel range. Perfect 300 ohm impedance matching to transmission line and set making losses a minimum. Offers high gain and broad response with strong horizontal reception pattern. Separate elements are independently rotated to yield maximum clarity and sirnal strength in each band. Dipoles and reflectors of heavy wall non-corrosive aluminum; sturdy steel mast 5 ft. long. Shipping Weight 8½ lbs.
No. 6444 List \$14.75



FOLDED DIPOLE WITH REFLECTOR

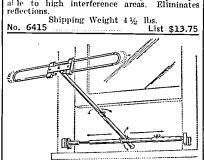
For areas of unusual natural interference. The folded dipole element offers matching feature for more even reception. Yields uniform response over a wide band of frequencies. For use with 300 ohm transmission line. Includes rubber stand-off insulators to prevent lead-in "contact" interference or sway. Hi-Band Antenna (No. 6440) may be attached for coverage of higher channels.

Shipping Weight 7 ½ lbs.

No. 6430

No. 6430 List \$13.75

FM RECEPTION
For maximum FM reception. Especially adaptalle to high interference areas. Eliminates



WINDOW ANTENNA
For All-channel Television Reception. Precision engineered, featuring ease of installation; maximum adjustable dipole for best all-channel reception; charable aluminum and steel construction; excellent reception. Special adjustable hase spans 30 to 50 inches to fit any wood or casement window frame. Skillfully designed support permits horizontal or vertical positioning for maximum directional response.

Shipping Weight 5 ½ lbs.

No. 6450 List \$15.35

No. 6008—For FM reception. List \$1.65

No. 6450

Latest Types

ICA's new television series offers a wide assortment of antennas and accessories for every type of installation. Includes latest indoor type antennas and varied outdoor set-ups.



DOUBLE FOLDED DIPOLE-REFLECTOR ARRAY

DIPOLE-REFLECTOR ARRAY

An outstanding uni-directional broad band antenna system for all-channel, high band-low band reception. Small folded dipole serves as the high band antenna and as a director for the larger dipole. Matching stub provided for use between high and low band dipoles. Excellent 300 ohm impedance matching to transmission line and set. Possesses extremely high sensitivity to build up weak signal reception from distant television transmitters. Engineered to overcome unusual interference from local sources. Includes high band-low band connecting lead; sturdy 5 ft. steel mast; rubber stand-off insulators.

Shipping Weight 8 lbs.

Shipping Weight 8 lbs.

No. 6448 List \$15.75



FOLDED DIPOLE

The ideal antenna for excellent low band television reception (channels 2 to 6) in areas of normally good signal strength with minimum interference present. For use with 300 ohm line. Sturdy 5 foot steel mast; non-corrosive aluminum dipole.

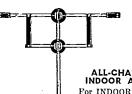
Shipping Weight 41/2 lbs.

No. 6420.....List \$8.95

FM RECEPTION

For optimum FM reception. Features clarity and fidelity. Eliminates reflections. Shipping Weight 3½ lbs.

No. 6405.....List \$8.95



ALL-CHANNEL TV INDOOR ANTENNAS

TELEVISION ACCESSORIES — TOOLS

VARI-ANGLE ANTENNA BASE ASSEMBLY



Suitable for flat or peaked roofs, gable roofs or side walls. Made of extra heavy gauge steel to insure rigid installation. Special feature permits a variety of mountring positions and directional rotating for best results.

No. 6132.....List \$2.65

ANTENNA MOUNT BASE

This separate section of the ICA antenna base unit is a useful aid in unusual installation problems where the entire ICA unit is not required. Excellent for side wall mounting. Heavy gauge steel.



No. 6133.....List \$1.25

PERFORATED MOUNTING STRAP



Designed for quick easy fastening of antenna masts to piping, etc. Perforated through entire length for maxidy . . . flexible.

Sturdy mum adjustability. Includes screw; nut.

No.	6134— 15"	LengthList	\$.T2
No.	6135 —20"	LengthList	.20

PERFORATED STRAPPING

Strong, flexible gal-vanized steel strap-ping that will serve a multitude of uses in antenna installa-tion work. Ideal for mounting masts on vari-shaped objects — chimneys, posts, etc. Width 34". In 12 or 100 ft. lengths.



No. 6148.....List \$.75 12 ft......\$4.95 C ft.

DOUBLET LIGHTNING ARRESTER



transmission line.

Weatherproof lightning weatherproof lightning arrester specially designed for television application. Suitable for any doublet type antenna system. Accelead or any other two-wire transmission line.

No. 6111.....List \$.60

LIGHTNING ARRESTER

The same weather-proof lightning arrester described above with convenient metal ground strap to permit ready affixing to water pipes or similar posts.





MAST COUPLER

Makes addition of masts for greater height a simple matter. Sturdy heavy steel tubing assures rigidity. Slotted feature makes for firm grip. Suitable feature makes for firm grip. Suitable for masts of 1" diam. Includes 14' bolts and nuts.

No. 6140 List \$1.25

ICA's Mast Coupler with 5 foot mast extension including hardware.

No. 6040 List \$2.65

ANTENNA WALL BRACKETS





CHIMNEY ANTENNA MOUNT



For simplified mounting against chimneys, rough parapets and other super-structures. These heavy structures. These heavy gauge steel supports solve many types of difficult mountings. The rugged steel strapping is perforated offering the

added feature of adjustability. Minimizes sway, shift or bending.

No. 6130List \$4.25 Set

RUBBER STAND-OFF INSULATOR

Fits antenna mast with a snug Fits antenna mast with a snug grip to assure minimum shifting of lead-in cable. Made of long-lasting, tough, natural rubber. Insulates antenna from local grounded objects. Suitable for 300 ohm twin lead. For masts 1" to 1¼" diameter.





CERAMIC STAND-OFF INSULATOR



Moisture-proof for outdoor use. Moisture-proof for outdood doc-offers rigid non-swaying grip on wire without insulation damage. For 30d ohm twin lead. With heavy screw for wood or masonry, Ideal for wood or masonry. Id long transmission lines.

No. 6126 List \$18.00 C

POLYSTYRENE TWIN-LEAD INSULATOR

For either indoor or outdoor application. Maintains firm non-slipping grip without insulation damage. Designed for 300 ohm twin-lead. Weather-resistant plastic. Convenient base hele. 300 ohm twin-lead. Weatherresistant plastic. Convenient
base hole.

No. 6127. List \$13.00 C | 6259 7" L. 43



COAXIAL CABLE



Standard 70 ohm impedance cable necessary in installations requiring long lead-ins or where high level of interference exists.

No. 6115 List \$13.00 C ft.

TELEVISION - FM WIRE

High-grade 300 ohm transmission line of the twin-lead type. Low-loss polyethylene insulation. Supplied in 1,000 ft.

No. 6020

List \$ 4.25 C ft. List 40.00 M ft.



GUY WIRE
For simple antenna installation needs. Strong but flexible enough for easy handling. Stranded copper and monel — 7 strands No. 26. 100 foot colle



No. 6147.....List \$.40 Coll

The perfect guy wire. Rugged, galvanized steel twisted wire—6 strands No. 20. Weather-proofed—450 lbs. tensile strength.

No.	6187 100 6188 500	ftList ftList ftList ftList	1.75 8.38	Coil
NO.	P183—1000	ILLISE	10.75	0011

INSULATED SCREW EYES

Dual purpose — for either twin-lead or coaxial cable, low-loss polyethylene insula-tion minimizes signal strength

	LISE
*No. 6119—3 ½" L	.09
*No. 6120-7" L	.15
** No. 62623 1/2" L	.12
**No. 6264-7" L	.19

Wood-screw threaded. **Machine-screw threaded.

INSULATED SCREW EYES

Stand-off screw eye with convenient mast fitting metal loop for snug securing of transmission line. Fits 1" masts. For twin-led or coaxial cable.

List



0-

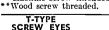
No. 6263—3½" L.....\$.15 No. 6265—7" L........................21

T-TYPE SCREW EYES Secures double lead-ins with effi-

cient spacing.

No. L. List *6256 3 ½" \$.28 *6258 7" .33 **6260 3 ½" .28 **6261 7" .33

Machine screw threaded.



T-TYPE
SCREW EYES
Same as above with
mast-fitting metal
loop for easy secure
installation. Fits
1" mast.



RADIO PRODU

"DE LUXE" AUTO RADIO ANTENNAS

The Latest, Improved ICA Auto Antennas

Pioneer manufacturers of auto radio antennas, ICA presents its latest line featuring: Noiseless Performance — Rattleproof Engineering — Lifetime Rustproof Guarantee - Easy One-Man Installation. Equipped with BOTH Delco and Motorola fittings.

REPLACEMENT ANTENNA RODS

Specially Designed for BUICK - FORD

and other cars using antennas of similar windshield mount type. Precision made to assure peak performance

 Simple Installation Lasting Service

• Triple-chrome-plated brass

No. 4545-Buick-3 Sec. Extends to 36".....List \$2.75 No. 4546-Ford-2 Sec. Extends to 54"....List 2.25

ICA Disappearing ANTENNAS

For Fender and Cowl Mount Suitable for all cars, old and new

56" of exposed antenna telescopes to 10". Does not obstruct vision.

Plastic and chrome-plated insulator hugs flat or convex surfaces.

Generous length cable . .

No. 4570.....List \$6.45

Three-Section Packed 10 0 to a standard carton Weight 11 lbs.

PEERLESS MODEL

Designed especially for 1948 and earlier model cars. Improved streamlined

Features unique swivel base permitting easy angle adjustment to match contours of new cars.

No. 4571—Three-Section List \$6.95 10 to standard carton — Weight 11 lbs

ICA "TOPPÈR" ANTENNA

For variable angle mounting on tops of fenders and cowls of newest streamlined cars.

- Patented brass shim contacts prevent rattling or vibration.
- Dust and Moisture Proof.
- Snug-fitting tapered telescopic joints.
- Varied mounting positions to harmonize with contour of car.
- Generous length (48") shielded loom Lo-Loss cable . . . Vinylite covered insulation.

No. 4575... List \$5.45 Three-Section Extends from 20" to 63"

"PIVOT TOPPER"

New development in variable New development in variable angle mountings. Special type pivot permits universal angle mounts. Easily installed, Merely set rod to desired angle and the control of the co tighten securing nut. Hi-Q loss cable. 48" lead-in.

No. 4576 List \$4.95 Three-Section

Extends from 20" to 63" 10 to stand, carton, Wt. 10 lbs.





NEW ANTENNA DISPLAY

FREE . . . Ready to Use

A sales stimulating display. Colorful . . . Neatly styled. Suitable for window or counter. (Size 20" x 20".) Display is FREE, you pay only for the following fully-mounted Antennas:

No. 4541—"Rocker" Cat No. No. 4801-Uni-Mount 4500 No. 4568-Side Cowl No. 4575-Topper

List \$19.90

"ROCKER" ANTENNA

A Variable Angle Antenna to Fit the Contours of All Car Bodies

- Suitable for all cars,
- Easily adjusted to desired angle.
- Weatherproof joint construction.
- Easy, one-man installa-
- Streamlined design to harmonize with latest cars.
- · High-luster bakelite insulator . . . tamperproof.
- 48" Lo-Loss cable.
- Completely assembled, ready for installation. No. 4541...List \$5.25

Three-Section
Extends from 23 ½" to 72"
10 to standard carton. Weight 16 lbs.

UNI-MOUNT ANTENNAS

The Universal Aerial, Fits All Types of Cars . . . Old and New. For Underhood Mounting

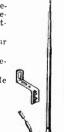
- Streamlined modern design.
- Equipped with inter-change-able brackets for either side-hood or alligator hood mountings.
- No drilling of holes into car body necessary.
- Sturdy bakelite and chromeplated brass insulator.
- Shielded loom LO-Loss cable 36"... vinylite insulated.

No. 4801....List \$4.45

Three-Section
Extends from 20" to 63"
10 to standard carton, Wt. 11 lbs.

No. 4803.....List \$5.45 Three-Section

Extends from 31½" to 96" 10 to standard carton. Wt. 14 lbs.



SIDE COWL ANTENNA

A Series of Side Cowl Antennas for Wide Application Includes patented brass shim contacts for noiseless perform-

contacts for noiseless performance; brass swivel coupling for easy installation; shielded Lo-loss cable, 36" long.
No. 4566 (10 lbs.*) List \$4.45
3-Section. Extends 20" to 63"
No. 4553 (11 lbs.*) List \$5.45
3-Section. Extends 31½" to 93"

HEAVY DUTY AERIAL

Made of extra large diameter brass tubing. Ideal for long dis-tance reception and rugged

wear.
No. 4568 (14 lbs.*) List \$4.75
3-Section. Extends 29" to 68"
No. 4569 (15 lbs.*) List \$4.95
4-Section. Extends 30" to 80"
No. 4559 (15½ lbs.*) \$6.45
4-Section. Extends 36" to 110"

"PACEMAKER"

Has most of the features of above antennas but priced low for quick sales.

No. 4567 (10 lbs.*) List \$3.35

3-Section. Extends 25" to 62' *10 antennas in standard pkee



AUTO RADIO CONDENSERS AND SUPPRESSORS

ICA WIRE WOUND SUPPRESSORS LOW RESISTANCE 30 OHMS. D. C.



These suppressors have an extremely low D.C. These suppressors have an extremely low not affect the intensity of the ignition spark or cut down the speed of the car.

No.	List
2351B-Spark Plug Suppressor	\$.65
2353BDistributor Suppressor	.65
2354B—1940-41 Slip-On Suppressor; Will Also Fit Older Type Cars	.65

ICA AUTO ANTENNA CONNECTORS AND ADAPTERS



No. 2347-Antenna Connector. List\$.10 ea.



No. 2348-Standard Fuse Holder, List \$.15 ea.



No. 2349 Jumbo Fuse Holder 2½ long x½ wide List\$.30 ea.



No. 2372 - Lead-in Adapter — converts standard leads to Motorola Fittings. \$.30 ea. List



2375

List \$.10 ea. No. 2375—Motorola Pin PlugL No. 2378—Motorola Shielded Jack List \$.20 ea.



No. 2396-Lead-in Adapters converts Motorola lead to Delco Fittings.

\$.10 ea. List



No. 2357 Ignition Cap Nut ...\$2.00 C List

No. 2356 Ignition Cable Lug List\$2.00 C

ICA WHEEL HUB STATIC ELIMINATOR Used under hub of front wheel.

2364

2360

UKKU

2363



An essential on all cars to eliminate front wheel static. Less Back Plate and screw.

No. 4476B

ICA SUPER-TEST AUTO RADIO IGNITION SUPPRESSORS

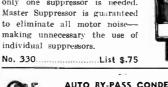
of Moulded Bakelite-All Metal Parts Made Made of Rugged Machined Brass



S C O D E	F
Type No.	List
E-349B-Spark Plug Slip-on Suppressor. Fits 1940-41 cars	\$.30
E-349F-Slip-on Spark Plug Suppres- sors for New Model Ford cars	.30
D—3508—Spark Plug Suppressors with Dual Threaded Inserts	.30
D-3518-Spark Plug Suppressors for Ford cars up to 1939	.30
A-377 -Bracket type Suppressor	.30
B-352B-Distributor Suppressor for all	
cars	.35
C-4461 -Ford Early Models	.35
C-4463-Ford Late Models	.35
F-4465-Cable Type Suppressor	.30
1	

MASTER DIST. CARBON SUPPRESSOR --- 10,000 OHMS

For use on new type cars where only one suppressor is needed. Master Suppressor is guaranteed to eliminate all motor noisemaking unnecessary the use of individual suppressors.





AUTO BY-PASS CONDENSER

For by-passing animeter, dome light or generator. Capacity mfd.

No. 1244.....List \$.55

ICA GENERATOR SILENCER

Heavy duty generator condenser eliminates generator, ammeter, distributor noises. Capacity

No. 1243.

.....List \$.80



ICA FORD V8 NOISE SILENCER No. 1245 1 ist \$ 85

ICA FORD V8 CONDENSERS FOR 1939-1941 MODELS

Equipped with Special Bracket. Capacity 1/2 mfd.

List \$.15 | No. 1246.....List \$.80



No

22

150

330

REPLACEMENT PARTS FOR ANTENNA AND FUSE RETAINERS

No. 2360-Female sleeve of fuse connector List \$5.00 per C No. 2361-Female sleeve of antenna connector

List \$3.50 per C No. 2362-Male part of antenna connector

List \$3.00 per C No. 2363-Spring for both antenna and fuse connectors List \$1.00 per C No. 2364-Fiber insulator for auto fuse holder

No. 2365-Bakelite eyelet bushing

List \$.90 per C List \$2.50 per C

INTERFERENCE SUPPRESSOR SET



For Auto Radio All the needed con-densers, suppressors, etc. for a complete installation. Neatly packaged as a com-plete unit. Includes easy instructions. For all cars — old and new. Packed

individually or in attractive counter display

notaing (o sets.	
No.	For	List
	Cyl. Cars (except Fords) \$4	
SK-26	Cvl. Cars (except Fords)	3.40
SK-3-F	ord Cars (to 1938)	4.00
SK-4-F	ord Cars ('39 to current)	4.05



ELBOW SHAPED SUPPRESSOR

Auto ignition suppressor. Elbow Molded-in-bakelite. Machined brass. Metal parts.

No. 4464 List \$.30

ICA AERIAL KITS



Carries all the essentials for complete antenna installation, packed in handsome 2-color box. Includes:

50 ft. heavy 7 strand tinned copper aerial wire. 22 gauge—30 ft. stranded copper, insulated weatherproof, lead-in wire—10 ft. ground wire, 22 gauge—Ground Clamp— Lead-in Strip—Underwriters' Approved Lightning Arrester—2 Porcelain Insulators -2 Nail-it Knobs.

.....List \$2.50 No. 654.....

SPECIAL KIT

Includes the following aerial kit elements:

50 ft. heavy 7/22 tinned copper aerial wire—30 ft. stranded copper insulated weather-proof lead-in wire—10 ft. No. 22 Ground wire. 2 Porcelain insulators—Ground wire. 2 Porcelain insulators — Ground Clamp—Lead-in strip—Lightning arrestor.

No. 653 List \$2.25

CAPITALIZER KIT

Includes the following components:

100 ft. tinned aerial wire—7 strand copper and monel—30 ft. insulated lead in wire— lightning arrestor—2 Porcelain insulators —Ground Clamp—Lead-in strip.

No. 651 List \$1.65

JUNIOR KIT

utility kit for high-grade performance. Includes:

100 ft. tinned aerial wire—7 strand copper and monel—30 ft. insulated lead-in wire—2 porcelain insulators—Ground Clamp— Lead-in strip.

No. 649

ANTENNA ACCESSORIES Li. Porcelain Insulator—glazed \$.1 Ground Clamp—adjustable		
3 —Ground Clamp—adjustable1	st	
- Dead-III Strip/2 Wide	L0 L5	
6 —Approved Lightning Arrestor3		

NOW only

JERROLD TV-FM BOOSTER

Comes Equipped with the Amazing New, Built-in



Included At No Increase In Price

The Jerrold TV-FM Booster has been widely acclaimed for bringing better television reception to distant areas. Now, Jerrold makes another notable advance.

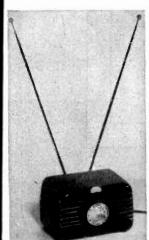
The Match-A-Tran is a new, variable step-impedence transformer that helps provide a perfect match between booster output and TV receiver—any receiver—on all channels. This assures that all the gain of the booster is delivered into the receiver. It is especially efficient on the high channels.

There Is A Difference

Yes, there is a difference between Jerrold and other boosters. Only Jerrold has a tuned-grid, tuned-plate circuit with a channel selector switch to select each channel. Only Jerrold gives a gain of 20 to 30 DB for the entire 6 megacycle bandwidth of each channel. Only Jerrold comes in a beautiful plastic cabinet. Only Jerrold has the Match-A-Tran.

Model TV-FM, \$37.50 List

JERROLD IN-TENNA



Indoor TV Antenna with Outdoor Antenna Gain

Jerrold In-Tenna combines an efficient indoor TV dipole with a high gain, wide band pre-amplifier. This combination offers a superior indoor antenna that is the perfect answer to TV installation problems in apartments, hotels, and private homes. Use it where an outdoor antenna cannot be installed and where an ordinary indoor antenna will not work satisfactorily.

The Jerrold In-Tenna is recommended as an indoor TV antenna, for use in any location up to 25 miles from the television transmitter.

Model TV IN, \$42.50 List



What is the MATCH-A-TRAN?

No present day receiver has an input impedence that is purely resistive for all channels. Thus, standing waves are present on all antenna lead-ins. These standing waves cause peaks and nulls of signal voltage to be spaced along the line at half wave length intervals for each frequency.

For best reception it is necessary that the receiver be connected at a peak signal point for each channel. In effect, the Match-A-Tran is an "electronic line stretcher" that can easily be adjusted for each channel. Thus, brighter, sharper pictures are obtained for all channels. Match-A-Tran is especially efficient on the high (7 to 13) channels.

JERROLD ELECTRONICS CORP.

Thank You!

When writing for additional information or when ordering from sources of supply listed in this book, please mention

RADIO'S MASTER

NEW Teletower with EXCLUSIVE Penn Pilot Hole

So Foolproof ... So Safe ...

A Green Apprentice Can Zip it up Fast

2 Men Do the Job — Minimizes Wind Resistance . . . Reduces Vibrotion — Weighs Less Than 2 Pounds per Foot. Sectional Construction (in 10 foot lengths) — Saves Storage Space.

Penn Pilot Hole — Cuts Assembly Time 1/3.
(Patent Applied For)

Quick erection by the installer means quick profit for the wholesale distributor... that's the boiled-down truth about the new Penn TELETOWER.

Why? Because—at last—a manufacturer has taken the trouble to engineer a simple mechanical feature that serves as a foolproof guide to speedier, safer tower erection. One leg of the middle section in Penn's tripod-type tower is made longer than the others. Position this single leg correctly and — zip!— the other two are automatically brought

into correct alignment.

As a result of this exclusive feature, Penn offers a tower with tripod stability that's as simply erected as a single pole. Two "green-hands" can put this tower up fast . . . and in safety!

When erected, this Penn Teletower forms a rigidly locked tripod that is unaffected by high winds and will not vibrate out of position. Yet, the entire assembly — built of lightweight steel — weighs less than 20 pounds. Sectional, prefabricated construction permits space-saving storage. Cross braces on tripod serve as rungs and make the

tower a safe, useful ladder when erecting antenna. Mount is so designed that not an ounce of tower weight rests on the motor!

Penn Teletowers are already on the way "up"! . . . on roofs . . . and in sales! It will pay to drop us a line. A profitable Penn Teletower connection in your territory may still be available — Though we anticipate heavy Distributor demand. Write or wire today. No obligation.

PENN BOILER AND BURNER MANUFACTURING CORP.

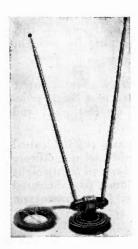
All Channel Television and F-M INDOOR PORTABLE ANTENNAS

The most beautiful antennas on the market—highly efficient—compact—colorful. SPICO Antennas have been accepted as standard equipment by leading television receiver manufacturers. The TENNA-MASTER is available in 2 colors, and with 3 section dipoles and plated faceplates.

EXCLUSIVE FEATURES:

- Perma-Tension telescopic construction.* Lock-Notch vertical orientation, eliminates knobs and tightening. Clean job—no soldering or lugs showing, wires completely concealed. Rigid construction throughout; extra heavy wall, and larger diameter tubing.
- YET IT COSTS NO MORE!
 Tenna-Master Model TV 93B
 Black bakelite housings and base.

Tenna-Master Model TV 93AMahogany bakelite housings and base.



PLUGIN-TENNA

PLUGIN-IENNA

Contains all quality features of above. ◆ Antenna has built-in 4-prong plug which plugs into 4-prong socket molded into base, providing rigid support and excellent electrical contact. ◆ Antenna easily removed from base and stored in drawer when not in use. ◆ Engineer-tested, approved, and sold at standard equipment by leading TV set manufacturers.

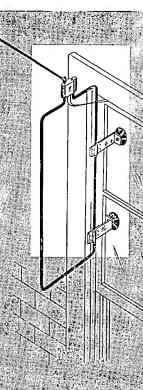


We manufacture a complete line of standard auto radio antennas. Television, F-M antennas and component parts manufactured to specifications. Your inquiry invited.

*Patented, U. S. Pat. Off.

SPIRLING PRODUCTS CO., INC.

62 GRAND ST., N.Y. 13, N.Y.



Wind-D-Laap

THE IDEAL APARTMENT HOUSE ALL CHANNEL TV & FM ANTENNA

WIND Q-LOOP is a completely novel approach to the problems affecting apariment house or restricted zone installation of television receivers. Constructed of a single rectangular loop and one dipole. WIND O-LOOP is attached to title pone of any window, indoors or out, by means of two jubber suction cups. The flat lead in wire may be brought into the house over the top of the window sash and down behind the currain or drape to the receiver, thus making the entire antenna invisible from the room.

WIND O LOOP, is packaged complete with twenty-five feet of lead in, one end of which is already attached permanently to the antennation greater convenience of installation. It is, also provided with screws for use instead of the suction cups where installation upon a wood surface is desired. An all-channel antenna, WIND OLOOP may be priented through 180° for maximum gain and may be permanently clamped in the most advantageous position. Since it is almost completely assembled upon delivery,

WIND OLOOP may be assembled and installed in three minutes or less by anyone. Complete with all necessary attachments and 25 feet of wire.

List Price

\$8.50

Di-Loop

TELEVISION

AND FM ANTENNA

DI-LOOP and all-channel TV and FM Antehna is intended primarily for roof-top installation and is packaged complete with an aluminum of mast. Constructed of a loop and two dispoles, DI-LOOP uses the loop for high frequency reception and the dispoles for low. When used on Now, frequencies the loop acts as a resonated section for the dispoles.

DI-LOOP is a high-gain antenna, showing up to four times the gain of conventional folded dispole antennas, yet its simplicity of construction and sturdy all-metal design insure speedy. Installation and a long-life of excellent performance.

¿An excellent antenna in any area, DILOOP has been found to be ideal in fringe a eas of reception where it has been found to outperform antennas priced many times over its own low price.

Complete with 6' Mast ... List Price \$12.50

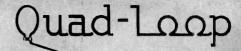
Additional 6 extension sections with connector alamps and guy rings. List Price ... \$3:50



MANUFACTURING CORPORATION

YONKERS 3. N.

"Wind-O-Loop" and "Di-Loop" are registered trade marks of Square Root Mfg. Corp. Patents Pending.



DELUXE
SELECTIVE
DIRECTIVITY
TV & FM ANTENNA

QUAD-LOOP, a quadrature-phasing antenna, achieves all of the advantages of mechanically rotated antennas without any moving parts. Controlled AT THE RECEIVER by a single knob, QUAD-LOOP selects maximum gain for each channel, regardless of the geographical location of the transmitting station.

Because it requires no orientation, QUAD-LOOP needs but one man to install instead of two, thus cutting installation costs materially. Ninety per cent assembled upon delivery, QUAD-LOOP may be completely assembled and installed in far less than the usual time required and because its sturdy, all-metal construction has no moving parts to wear or to become defective QUAD-LOOP will outlast mechanically rotated antennas without servicing or adjustment.

Constructed of two loops and four di-poles, QUAD-LOOP uses the loops for high frequency reception and the di-poles for low. When used on lower frequencies the loops act as resonated sections for the di-poles.

Kit List Price \$34.50



MANUFACTURING CORPORATION

YONKERS 3, N. Y.

"Quad-Loop" is a registered trade mark of Square Root Mfg. Corp. Patent Pending.

5-70

ANTENNA DESIGN ENGINEERS **SINCE 1921**

RUTHERFORD AVENUE ON ROUTE 35

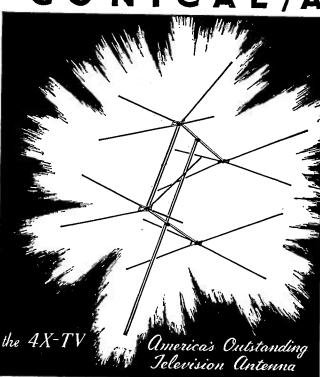
INC.

ANTENNA

DEVELOPMENT

MANUFACTURING

ASBURY PARK 1, NEW JERSEY



the 1X-TV-FM

For Use in **Primary Signal Areas**

FEATURES:

- Bi-directional Hi-gain Conical "V"
- Beam Channels 2 to 13 and FM
- 2 to I Front to Back Ratio
- Low Inception Angle
- Extremely High Signal-to-Noise Ratio 150-Ohm Non-Varying Impedance Uses 72-, 150- or 300-Ohm Transmission

- Lines

Minimizes "Ghosts"

the 1X-TV-FM-S

For Use between Separated **Television Stations**

FEATURES:

- Bi-directional Hi-gain Conical "V"
- Beam Channels 2 to 13 and FM
- 2 to 1 Front to Back Ratio
- Low Inception Angle
- Extremely High Signal-to-Noise Ratio
- 150-Ohm Non-Varying Impedance
- Uses 72-, 150- or 300-Ohm Transmission Lines
- Universal Mounting Clamp

Teirex Conical Antennas technically and practically assume response characteristics similar to a solid conical cone, giving broad band and high gain response with full audio and video band pass over the entire television

audio and video band pass over the entire television spectra.

The nominal center impedance is designed to be 150 ohms and is non-varying because of the conical shaped receiving dipoles. The receiving dipoles are filted forward to present a "V" to the incoming wave, preventing the receiving lobe changing with increasing frequency, and narrowing the forward receiving lobe. Thus the Telrex receiving dipole is an effective ½ wave element on channel 2 increasing to % wavelength on channel 3 and increasing in effective "V" beam action to channel 13 where it has become a full wevelength on each leg with the maximum receiving lobe being in line. The reflectors are effective at all frequencies with a front to back ratio of better than 12 DB on all frequencies.

with a front to back fails of being made frequencies.

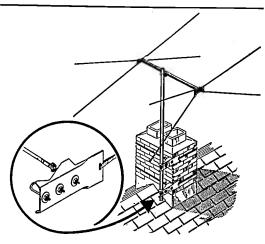
Unlike other methods of covering both bands, Telrex Antennas do not introduce phase shift or discriminate in favor of one band versus the other or one station versus another, and need only one transmission line. Closer to the stations at some locations it may be necessary to use another antenna because one or more stations are located too far either side of the receiving lobe. This antenna should have its own transmission line. Results can be obtained by connecting the antennas together, although this should be avoided as it may impair the reception on one or more stations. When the stations are within a 5 to 15 degree sector depending on distance from the transmitter the Telrex antenna used for maximum efficiency at low frequencies becomes a much more efficient antenna on the high frequencies than a separate cut-to-frequency stacked high frequencies than a separate cut-to-frequency stacked antenna.

high frequencies than a separate cut-to-frequency stacked antenna.

The 2X-TV model presents a modified stacking of ½ wave with highest possible signal-to-noise ratio and minimum reflections. The 4X-TV model is stacked to present a spacing of ½ wave on channel 2 increasing to full wave-length spacing on channel 3 lowering the angle of inception tremendously and eliminating high angle response lobes directly above and below the antenna. The gain effected by stacking is a variable factor depending on distance to the station, angle of radiation, season of year, time of day, etc., but it accounts for tremendous gain and minimizes noise, flutter, fading and reflections. The 8X-TV model presents the ultimate in television arrays with all band, coverage.

The 150-ohm non-varying center impedance makes it possible to use any of the commercially available transmission lines whether 75-ohm coaxial, 90-ohm ribbons with a standing wave ratio never exceeding 1.6 to I regardless of channel being received. Standing waves cause excessive phase-shift, causing blurred pictures, multiple images and decreased sensitivity.

You are invited to consult our engineering staff on any unusual antenna problems.



Model 2X-TV installed on chimney, using the Telrex CM-2A Chimney Mount with stainless steel band.

ANTENNA DESIGN ENGINEERS **SINCE 1921**

RUTHERFORD AVENUE ON ROUTE 35



ANTENNA

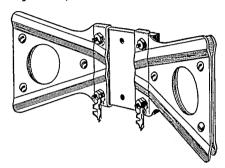
- DEVELOPMENT
- MANUFACTURING

ASBURY PARK 1, NEW JERSEY

ACCESSORIES AND

MECHANICAL NOTES

Telrex products are designed to minimize assembly time on the "job" assuring a considerable time-saving and a perfect mechanical installation.



Telrex conical antennas are captivated within better than 3" of clamping action, providing better electrical contact over a longer period of time and a mechanical support that is second to none.

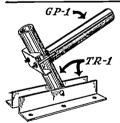
Mast or pipe clamps supplied are universal, allowing correct alignment and flexibility of mounting arrangements, from 3/4" up to and including 15/6" tubing.

The hardware in use is at all times the best money

can buy overdesigned for the job.

Transmission Line Stand-off. Stainless steel banding and phenolic. Used on any size mast or tacked to the building to keep the transmission line away from the pipe or building. Durable; easily installed.



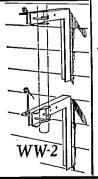


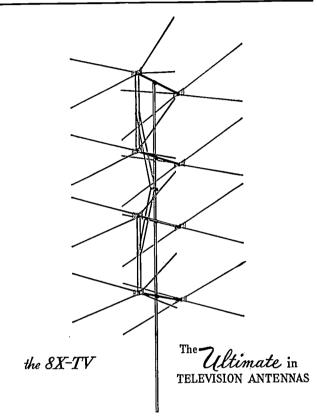
Gin Pole Accessory for use by the installer when a long mast is to be erected. Used in conjunction with the TR-I (tilt-roof mount) makes erection of long masts a simpler task. Removed after installation for re-use.

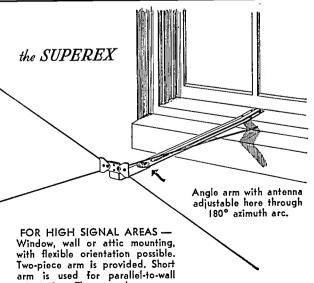
Tilt-roof Mount, sturdily built of angle iron—easily mounted to roof—free action of mast for rotation and orientation.

Window Wall Set. A two-piece installation set for use where a roof installation cannot be made or where the roof overhang would interfere with mast being installed flush to the building.

> Made of welded angle iron with a cross brace of steel wire. Paint-dipped, assures a lasting installation.



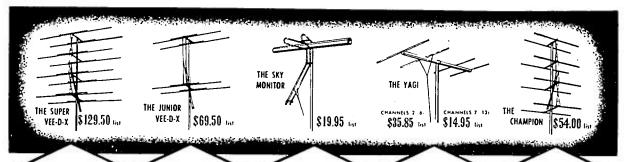




orientation. The second arm per-

mits other than parallel orientation.

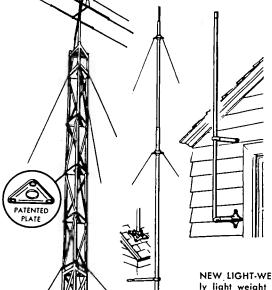
VEE-D-X HAS EVERYTHING YOU NEED FOR BETTER TV & FM INSTALLATIONS



The RD-13, a four bay, full wave, thirty-two element, stacked array, holds every record for long distance reception. The JR-13, a two bay, full wave, 16 element, stacked array, adequate for most fringe areas. The DGA-12 — for the near fringe and primary areas. Broad band antenna with tunable "Q" Section. Extremely flat response.

The RDY Series, a four element beam cut especially for any channel. Utilizes 2" diameter boom with 1" elements for low channels. High gain at low cost.

The RDH series, a 16 element, full wave, four bay, stacked array, cut especially for any one of channels 7-13. This antenna will out-perform any other high channel antennas.



Whatever you need in the line of TV & FM antenna equipment may now be obtained from one dependable source. Why gamble with profits and customer good-will when you can be sure of all-around satisfaction with Vee-D-X—the complete single source quality line. Every Vee-D-X product is skillfully engineered for your active range of technical requirements and problems. Fast low cost installation insures full profit margin for you on every sale.

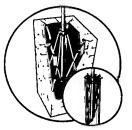
All ANGLE
MOUNT. Particularly suited for
mounting on side
of house near a
window for manual rotation of antenna. Designed
to clear overhang
of eaves, also excellent for flat or
pitched roof.

-\$7.50 List

NEW LIGHT-WEIGHT MAST. Extremely light weight (a 20' section weighs only 11 lbs.) without sacrifice of strength. Can be rotated after guy cables have been installed.

VEE-D-X SECTIONAL TOWER. Made in 10' and 20' Sections for mounting antennas up to 140' high. Sections are shipped assembled and painted. Strictly all welded construction. Antenna can be rotated from base.

C H I M N E Y MOUNT. Fits any opening — round, square or rectangular from 4" to 22", accommodates 1", 1½" & 1½" mosts, takes only 60 seconds to install. \$7.50 List.



LIGHTNING ARRESTOR. Installed without cutting transmission line. Does not disturb impedence match. High dielectric, low loss. \$2.50 List.

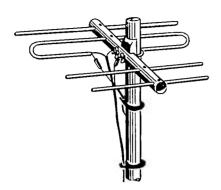


THERE'S MORE VISION
IN TELEVISION
WITH VEE-D-X

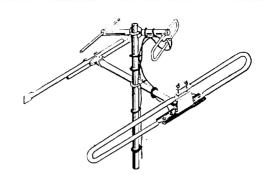
The LaPointe Plascomold Corp. UNIONVILLE, CONN.

ALL VEE-D-X PRODUCTS ARE FULLY PROTECTED BY PRODUCT LIABILITY INSURANCE

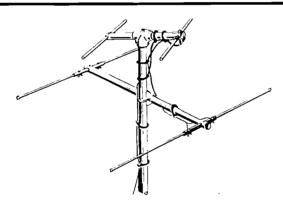
THE COMPLETE SOURCE OF TV AND FM ANTENNAS AND ANTENNA ACCESSORIES



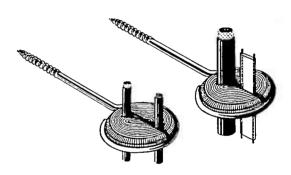
MODEL H-MFDR-5X. Highmaster TV Antenna. The last ward in high frequency four-element array design. Super-sensitive pick-up in lacal ar fringe areas. For channels 7-13 and can be independently oriented when used with law frequency array. Model shown contains patented A.A.K. filter divider network which is optional.



MODEL HLB-4. High-Low TV Deluxe Array. Factory assembled far fast installation — no hardware bag. Low array contains adjustable reflectar elements for rejection of ghosts, also usable as directars when rotated to reverse pasitian. Far all channels and use in lacalities where there are reflection problems. This madel has high farward gain and narrow band. Patented A.A.K. filter divider network is optional.



MODEL HLC-5. High-Low TV Standard Injector Array. Features slatted injection-type elements with bolts and wing nuts far fast assembly — na taols are required. Cavers all channels and is used where a gaod signal level is available, but where there are slight reflection prablems. Patented A.A.K. filter divider network is optional.



MODEL SSO-3. Steel Stand-Off. This universally efficient insulatar will rigidly clamp any size of TV or F.M. twin-lead or caaxial cable. Various clamping cambinations are available by merely reversing either or both half sections of the grommet. Supplied in 3" or 7" lengths. Made of semi-hard, weather resisting rubber compound, which will not deteriorate in heat or cold.

OAK RIDGE ANTENNAS

- Complete line of Model 5 TV Standard Rig-Fast Injector Arrays.
- Complete line of Model 4 TV Deluxe Factory Assembled Arrays.
- All lines contain single dipole to "lazy H" high and low frequency rigs; and, high-low combinations.

OAK RIDGE ACCESSORIES

- 4-Way Clamps
- Chimney Wall Mounts
- Flat and Coaxial Cables
- Steel and Rubber Stand-Offs
- Wall Mounts (6" and 12" sizes)
- Chimney Mount Conversion Units
- Telescopic Masts (24 ft. and 36 ft.)

Send for FREE CATALOG



Rigged Fast To Last

OAK RIDGE ANTENNAS

239 East 127th Street, New York 35, N. Y. Manufacturing Division of Video Television, Inc.

New!

TELEVISION ANTENNA ROTATOR by alliance

Makes the Image Clear-Reduces Interference!



This new Directional Aid means instant "arm-chair" control for Television Antenna. Dealers and Service Shops can order from their iobber now!

CONTROL BOX Size: 5" x 5" x 4"

Announcement! New deluxe Tenna-Rotor with indication control case (Model DIR) now available. . . List Price \$49.95

Model ATR Size of rotor unit 73/4" x 51/4" x

> Shipping weight 12 lbs.

• The Alliance Tenna-Rotor is an antenna rotator designed to rotate the beam antenna in FM, Television and other high frequency radio applications. It consists of the rotator which is mounted on the antenna mast and a control box placed adjacent to the re-

The rotator unit, fully enclosed in a split zinc die-cast housing, is an electrically driven rotor — actually a rotating hollow shaft, into which the antenna center post is clamped. A four-conductor cable connects the rotator with a plastic control box which plugs into any 60-cycle 110-volt AC house circuit. A three-position selector switch controls the rotator. Throwing the switch to the right or left rotates the Rotor shaft clockwise or counter-clockwise through a complete arc of 365 dearees.

At the position of optimum reception, the switch is thrown to the center OFF position. Thus, Tenna-Rotor provides positive, instant control of rotation, enabling the operator to select the exact position for "peaked" reception! An automatic signal light illuminates a screen on the panel and tells when the limit of travel in either direction is reached. Tenna-Rotor is factory lubricated for life . . . designed for years of rugged service, works in any weather and the rotor unit resists corrosion. Tenna-Rotor reduces interference, expands the range and improves the performance of TV and FM installations. Amateurs can use it for transmission and reception with a special accessory thrust bearing (List Price \$7.95 additional) which will handle most three element beams with a thrust load up to

SPECIFICATIONS Electrical

Input volts-110 volts 60 cycle AC Input power-30 watts Clockwise or counter-clockwise rotation Instantly reversible motor Minimum coast to stop No receiver interference

Mechanical

Positive mechanical stop at end of rotation Rotates through 365 of arc at speed of approx. 1 r.p.m. Factory lubricated for life Moisture sealed Corrosion resistant components throughout--cadmium plated parts Maximum allowable antenna weight—20 lbs. Maximum O.D. for antenna mast-13/8" Interconnecting cable—4 conductor No. 20 gauge

Rotator Size—7¾" x 5¼" x 8" Control Case Size—5" x 5" x 4" Approx. Shipping Wt., 12 lbs.



ANTENNA MOUNTING EQUIPMENT

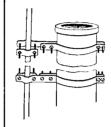
THE ONLY FULL LINE... a mount for every purpose ... all constructed of heavy gauge steel — NOT Castings — treated with a new and improved waterproof coating made to Navy specifications for complete protection against weather conditions ... in a handsome semi-gloss silver finish ... vise-type clamps accommodating masts of $\frac{3}{4}$ " to $2\frac{1}{2}$ " ... all hardware pre-assembled so that no time is lost in installation.



CHIMNEY MOUNT

Model CMA

Designed to allow any spread between mast brackets. Exclusive turnbuckle feature provides rapid and secure take-up. Installed in a matter of minutes with ordinary tools . . . no drilling necessary. Several other chimney type mounts available.



VENT PIPE MOUNT

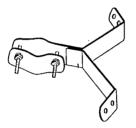
Model VM-6

For speedy installation of mast on 4" to 6" vent pipes or poles.

EAVE BRACKET

Model EM-6

For a simple installation allowing a 6" stand-off.





ADJUSTABLE EAVE MOUNT

Model EMX

A practical tripod support with simple adjustment permitting an 8", 10" or 12" stand-off or as much as 16" when used in conjunction with Metalace Mast Joiner. Three other non-adjustable models available for 12", 18" or 24" stand-offs.



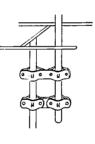
MAST EXTENDER

Model EM-8

Permits a 4" bite on any two masts of equal or unequal diameter. With six guying points.



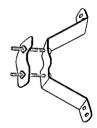
For joining masts of equal or unequal diameter . . to add Hi-Freq. to an existing installation. With four guying points.



WALL MOUNT

Model WM-4

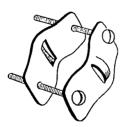
For rugged in-close mounting allowing a 4" stand-off.

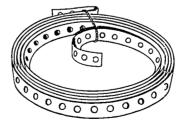


GUYING CLAMPS

Model GC-4

Vise-type clamps to hold guys at any point on a mast.





STEEL STRAPPING

Model SM-100

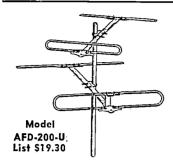
 $\frac{3}{4}''$ galvanized steel with $\frac{1}{4}''$ holes on $\frac{3}{4}''$ centers . . . for mounting and securing masts to odd shaped forms. In convenient $\frac{100'}{100}$ rolls.

IMMEDIATE DELIVERY • LOWEST PRICES • MANY OTHER PRODUCTS • SEND FOR CATALOG

METALACE CORPORATION

Dept. 112 2101 GRAND CONCOURSE NEW YORK 53, N.Y.

RMS TELEVISION ANTENNAS ACCESSORIES

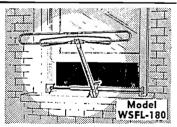


ALL-CHANNEL FOLDED DIPOLES with Reflectors

Aluminum tubing, massively constructed, specially ridged at joints for maximum strength. Both arrays separately oriented, U-Bolt mounting, Complete

Other RMS All-Channel **Television Antennas**

	Price
ASD-150—Straight Dipoles with	
Reflectors and mast	\$18.20
Reflectors and mast	20.00
ASD-150-U—Straight Dipoles with	20.00
Reflectors, less mast. U bolt	
mounting	17.30
mounting FFD-120—Folded Dipole, with hi-freq	
FRD-130—Folded Dipole with	10.60
Reflector, hi-freq lobe, and mast	14.20
ALHS-675—Straight hi and lo dipoles,	10.20
reflector, in line	15.30
ALH700-Folded hi and lo dipoles,	
reflector, in line	17.40
CAS725—Pyramidal, with reflector	21.15
reflector	42.30
YAC800-Dual "U"	17.40



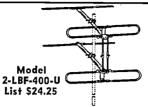
WINDOW SILL **TELEVISION ANTENNAS**

WSFL-180—All channel folded dipole with hi-freq lobes, mounts in any window, no drilling or cutting, no holes. Perfectly secure, dependable. List \$17.00 WSS-160—Straight Dipole window antenna, similar to above, channels 2 to 6. List \$13.80





You are invited to write for catalog #215-U, illustrating outstanding RMS antennas and associated accessories.



LOW BAND FOLDED **DOUBLE DIPOLES**

with Reflectors

High gain array for channels 2 to 6. U-bolt mounting, less mast. Easily oriented. Rigid, massive construction. Other RMS Low Band Antennas

List	Price
SD-10—Straight Dipole	\$ 6.85
FD-25—Folded Dipole	9.40
SDR-50—Straight Dipole with Reflector	12.50
FDR-100—Folded Dipole with Reflector	15.00
LBS-30-U-Straight Dipole with Reflec-	•
tor, U-Bolt mounting, less mast	9.75
LBF-40-U-Folded Dipole with Reflec-	
tor, U-Bolt mounting, less mast	11.60
2LBS-350-U-Stacked straight Dipoles	
with Reflectors, U-bolt mounting,	
less mast	19.25
7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 -	17.23

HIGH BAND **ATTACHMENTS**

Model HFS-250 List \$6.60 Straight Dipole with reflector and mast, for channels 7 to 13. Easily attached to main antenna mast, by clamps supplied. Heavy gauge aluminum, polystyrene insulation.

Other RMS High Band Attachments

SAH-I-Straight Dipole with AH-1—Straight Dipole with Reflector 5.40
DAH-5—Folded Dipole with Reflector 5.40
HF300—Folded Dipole with Reflector, mast and brackets 7.00
2HBS-450-U—Stacked Straight Dipoles with Reflectors, U-Bolt mounting, no mast no mast 2HBF-500-U—Stacked Folded Dipoles with Reflectors, U-Bolt mounting, 10.65 11.60

TELEVISION ANTENNA DIRECTORS

D2 to D6—Directors cut to exact channels 2 to 6. List each \$6.05 D7 to D13—Same, channels 7 to 13. List each \$4.50

EXTENSION MASTS for Television Antennas

AM-6—Heavy walled aluminum 11/8" OD, 6 ft. length. List each \$3.50 SM-6—Heavy gauge plated lock-seam steel,

6 ft. length.

SM-6—Heavy gauge plated lock-seam steel,
I" OD, 6 ft. length.

SM-10A—Steel, same as above, but 10 ft.
length. List Price Cartons of Twelve \$53.00

SM-10B—Steel, same, 10 ft. length, 11/4"
OD. List Price Carton of Twelve \$60.00

RUBBER STAND-OFF INSULATORS

For holding twin-lead neatly, securely at fixed distance from crossbars and masts.

> List Price \$8.25 per 100



SCREW EYE STAND-OFF INSULATORS

#3530—3½", for Twin Lead #3572—3½", for Coax Cable \$82.50 per M #730—7", for Twin Lead \$150.00 per M #772—7", for Twin Lead \$150.00 per M

RMS TELEVISION ANTENNA CHIMNEY MOUNT

Model SCM-100

Made of heavy gauge plated steel. Fits any chimney or other right rectangular roof structure, having girth up to 12 ft. List Per Pair \$4.30





WALL & CHIMNEY MOUNT

for Television Antennas Model WCM-500

Holds antennas securely 6" from any wall or chimney.

Made of heavy gauge plated steel, easy to mount. All hardware included. List Per Pair \$2.00

U-BOLT MOUNTING BRACKETS

Model UB-10





GUY WIRE RINGS

GR-1—1" 1.D. GR-2—11/8" 1.D. GR-3—11/4" 1.D. List Price any type, cartons of 100.

\$15.00

RMS MOUNTING BRACKET ALL ANGLE











for TELEVISION **ANTENNAS**

Model AMB

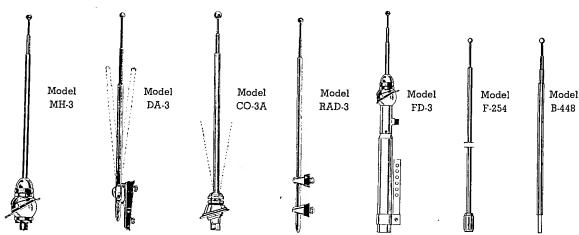
Made of heavy gauge plated steel, supplied with 2 "U" Bolts, nuts, 4 lag screws. mounts against any surface. List Price \$5.25

RADIO MERCHANDISE SALES, INC.

NEW YORK, N. Y.







THE CHOICE ACROSS THE NATION FOR QUICK, EASY INSTALLATION!

MH-3 MONARCH COWL-FENDER

Chrome plated all metal mounting base adjustable from flat to 30°. Does not crush. Holds adjustment permanently. 36" Radar Cable.

MH-3 List S5.45 3 Sec. 57"

DA-3 ADJUSTABLE SIDE COWL

Side mounting on sloping or vertical surfaces of cowl or fender. 1/2" mounting holes. Mast swing of 35°. 36" Radar Cable. DA-3 List \$5.45 3 Sec. 72"

CS-3 CHAMPION SIDE COWL

Quality Built—competitively priced. Chrome plated brass tubing. Black covered shielded cable with screw-on connector. Metal capped ceramic insulators. CS-3 List \$3.45 3 Sec. 66"

CO-3A ROTOLOK COWL-FENDER

Easy mounting through 1/2" hole. All tightening outside. Noncrushing chrome plated metal mount. VISE-LOCK eliminates braces. 36" Radar Cable. CO-3A List \$4.95 3 Sec. 57"

RAD DELUXE SIDE COWL

Built to superior quality standards. Automotive specification chrome plate. Low loss 100% shielded 36'' Radar cable with screw-on connectors. RAD-3 List 84.65 3 Sec. 70'' RAD-4 " 5.65 4 " 92'' RAD-5 " 6.65 5 " 112''

FD-3 CONCEALED COWL-FENDER

Chrome plated all metal adjustable mounting base. Strong, non-crushable. Waterproof, electrically efficient, guaranteed trouble free. 48'' Radar Cable. FD-3 List \$6.95 3 Sec. 4'' - 55''

F-254 FORD REPLACEMENT MAST

For 1941-42-46-47 Ford-Mercury Roof Antenna that operates behind windshield center post.
List S2.00 2 Sec. 54"

B-448 BUICK REPLACEMENT MAST

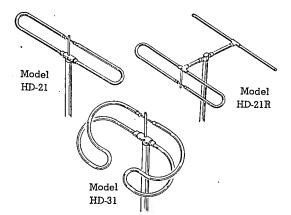
Replacement mast for roof aerials on all Buicks 1940 to present. B-448 List \$2.50 4 Sec. 45"

RADAR LEAD CABLES

Radar type coaxial polyethylene cable completely shielded. Type L as supplied with aerials. Extension type LE has male and female pin plug fittings.

Model	L-36	L-48	LE-12	LE-24	LE-36
List	\$1.35	\$1.60	\$.75	\$1.10	\$1.35
Length	36"	48"	12"	24"	36"
					•••

★ DOUBLE STAR ★ FM DIPOLES ★



HD-21 FOLDED DIPOLE

Impedance of 300 ohms matches RMA Standard receiver input. Complete with 8 ft. mast, guy ring, stand-off insulator, wall brackets, base and 50 ft. of 300 ohm line.

HD-21 List \$8.25 88-108 MC

HD-21R DIPOLE-REFLECTOR

Same accessories as Model HD-21 plus reflector to increase signal strength. More directional than Model HD-21 with much increase in forward gain.

HD-21R List \$10.75 88-108 MC

HD-31 DIFOLD DIPOLE

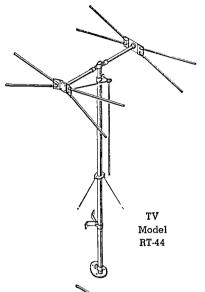
Much less directional than folded dipole. Use where signals come from several directions. Same accessories as HD-21.

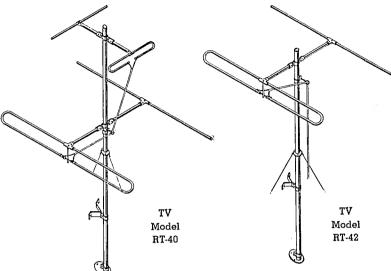
HD-31

List \$8.95

TV AND FM ACCESSORIES

ME-48	4 ft. steel mast extension List \$	1.25
HR-1		2.50
RQ-42	Stacking Jumper Bar	.75





TODAY'S GREATEST VALUE IN TV ANTENNAS

RT-44 SIMPLEX DIPOLE AND REFLECTOR

New "X" type aerial. Sturdy and simple to assemble. High gain on all channels. Fine for fringe reception. Complete with 8 ft. steel mast, guy washer, stand-off insulator, wall brackets and base. Model RT-44 includes 50 ft. 300 ohm cable.

RT-44 List \$13.25 RT-44 I. " 11.45

RT-40 HI-LO DIPOLE AND REFLECTOR

Separate high and low frequency bays for efficient reception from stations in different directions. Easy to assemble. Complete with same accessories as RT-44. Model RT-40 includes 50 ft. 300 ohm cable.

List \$12.75 RT-40... RT-40LL

RT-42 LOW BAND DIPOLE AND REFLECTOR

For reception on channels 2 - 6. Same accessories as RT-44. Model RT-42 includes 50 ft. 300 ohm cable. List \$10.75 RT-42____RT-42LL

RT-43 DUAL BAND DIPOLE AND REFLECTOR

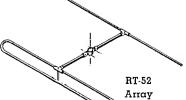
In-line type with special array to provide exceptional gain on all channels. Ideal where all stations are in same direction. Same accessories as RT-44. Model RT-43 includes 50 ft. 300 ohm cable.

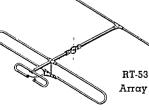
List \$12.25 RT-43_____RT-43LL_____

TELEVISION ARRAYS FOR STACKING PURPOSES

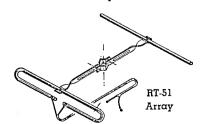
To increase gain and reduce interference, the following arrays are designed for use with no increase gain und reduce interference, increase gain und reduce interference, increase above carrials.

RT-51 High Band Array List
RT-52 Low Band Array "
RT-53 Dual Band Array "
RT-54 Simplex X type Array " __List \$2.50____





Array



S-80

40

TV Model

RT-43

RT-54

Array



AMERICAN PHENOLIC CORPORATION

Retainer Ring "S" Type Sockets

Extremely compact sockets, furnished complete with retainer rings. Mount in 1-11/64" keyed hole. Use Amphenol No. 25-LD-1 Punch and Die.

	Black Bakelite	List	Contacts	Steatite	List
(550)	78-S4	\$.13	4 Contacts	49-SS4	\$.47
	78-S5	.13	5 Contacts	49-SS5	.47
	78-S6	.13	6 Contacts	49-SS6	.47
	78-S7C*	.17	7 Comb. for		
C 7 3 3 3			7L, 7S		
	78-S7L*	.13	7 Large	49-SS7L*	.59
Black Bakelite	28-S7S	.13	7 Small	49-SS7S	.47
	78-S8	.17	8 Octal	49-SS8	.47
	78-S8L	.21	8 Loktal		
P0.021211.00	78-S9	.21	9 Octal Style		
4	78-S11	.29	11 Octal Style		
	78-A7P†	.30	7 for Miniatu	res	
MUNICIPAL AND SHE	78-A9P†	.45	9 for Miniatu	res	
100	78-B	.07	Blank		
6000	* Mounts i	n 1-21/6	4" keyed hole. I	Use 25-LD-2	Punch

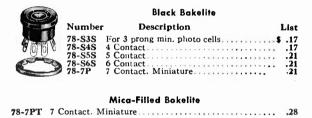
Steatite

and Die.

† Mounts in standard socket hole. Has miniature socket in center.

Miniature Retainer Ring Type Sockets

Mount in 5/8" round or "D" shaped hole with No. 2-9 retainer rings.



Duodecal and Diheptal Tube Sockets



Designed for television viewing tubes, oscilloscopes and other cathode-ray tubes. Provides means of grouping leads within the socket housing and bringing them out radially in a neat, unit-cable form, reducing the space required to a minimum. Grouping of the wires in the enclosed raceway eliminates flexing at solder terminals, minimizing breakage.

Removable socket cap provides complete enclosure for all connections, eliminating shock hazard, yet the cap is easily removed for wiring or servicing. Opening for the lead wire harness can be positioned in any of 61 ocations. Contacts are seated in individual wells, the walls of which form efficient creepage barriers.

wire harness can be positioned in any of 61 ocations. Contacts are seated in individual wells, the walls of which form efficient creepage barriers. Socket cap and body molded from high quality electrical bakelite. Contacts are Amphenol exclusive "clover-leaf" design featuring four full lines of contact on each tube pin.

The socket is designed for easy assembly and disassembly . . . requires no special tools.

Duodecal Socket for a maximum of 12 equally spaced pins on a circle diameter of 1.063*.

No. 59-402 List \$1.56

Laboratory Punch and Dies

For punching mounting holes for Amphenol connectors, plugs and receptacles. Made of tool steel, properly hardened.



For Amphenol Retainer Ring Mounting Tube Sockets, Rodio Plugs, etc.

Retainer Ring Hand Tools





51-5

J1-1

Convenient for assembling miniature sockets, plugs and tip jacks to panels or chassis. Designed for hand operation.

Num	er Description L	List	
51-5	For No. 2-9 Rings	.20	
51-6	For No. 2-11 Rings 1.		
	For No. 2-10 Rings		
51-1	For "S" type sockets and "CP" type plugs except 7C		
	and 7L sizes. Required where socket spacing is very close. 6.	.66	
51-2	For "S" type sockets 7-large and 7-combination 6.	.66	
51-3	For "SS" steatite sockets and "60" and "61" receptacles.		
	Of two-piece construction somewhat easier but slower		
	to use than 51-1 (above) for "S" sockets and "CP" pluss 6.	.66	

Magic Eye Assembly



For easily adapting or replacing a 6 prong magic eye tube in any radio having automatic volume control. Also for FM receivers, test instruments, signa ltracers, and as volume level and modulation indicators. In-

cludes 1 megohm target plate resistor wired into socket and 5 wire, color coded cable 22"long. Mounting bracket is slotted for tube adjustment. Complete as illustrated, with escutcheon and hardware for assembly. Tube not included.

No. 58-MEA6 Complete Magic Eye Assembly ... List \$1.51

Octal Magic Eye Assembly



Similar to No. 58-MEA6 shown above, but for octal type magic eye tubes. New universal short bracket for the smaller tube sizes permits use of any of the octal magic eye tubes including the dual pattern and the new multi-pattern types.

Complete with 8 wire, color coded cable, and the new multi-pattern types.

Complete with 8 wire, color coded cable, and the new multi-pattern types.

Complete with 8 wire, color coded cable, and the new multi-pattern types.

No. 58-MEA8 Complete Octal Magic Eye Assembly.....List \$1.51

Magic Eye Escutcheons

Hood type is of sturdy plastic with beautiful antique bronze finish. Full vision type for octal dual-pattern and new octal multi-pattern types is brass with antique bronze finish.



Number Description List 10-102 Hood Type, For 6 prong tubes. \$.15 10-2 Full Vision Type, For octal

tubes



COAXIAL CABLES AND CONNECTORS . INDUSTRIAL CONNECTORS, FITTINGS AND CONDUIT . ANTENNAS . RADIO COMPONENTS . PLASTICS FOR ELECTRONICS

AMPHENOL



AMERICAN PHENOLIC CORPORATION



MIP Molded-In-Plate Sockets

Molded of high dielectric black Bakelite, sturdy, steel mounting plate molded directly into the solid body? cannot come loose or vibrate. Contacts grip tube prongs firmly and retain their resiliency indefinitely. Mount in 1-5/32" round hole. Two 5/32" screw holes on 1-1/2" centers.

Number	Contacts	List	Number	Contacts	List
77-MIP-4	4 Contacts \$.12	77-MIP-8	8, Octal	\$.14
77-MIP-5	5 Contacts	.12	77-MIP-9	9, Octal style	
77-MIP-6	6 Contacts	.12	77-MIP-11	11,Octal style	
77-MIP-7L*	7 Large	.14	77-MIP-12	12,Octal style	.30
77-MIP-7S	7 Small	.12			

* 77-MIP-7L mounts in 1-9/32" D. round hole.



Compact MIP Sockets

Same as MIP series above but smaller in diameter. Mount in 1-1/8" round hole. Two 5/32" diameter mounting holes on 1-5/16" centers. Black Bakelite dielectric.

Number	Contacts List	
88-8 88-8X	8 Contacts \$.14 8, Loktal .21	

Saddle Type Sockets



Sharp nibs on mounting plate score chassis during riveting, breaking thru any oxidation for a perfect ground. Designed for bottom mounting in 1-1/8" round hole. Two 5/32" diameter mounting holes on 1-1/2" centers.

74-8. 8 Octal. Black Bakelite.....\$.14

High Voltage Safety Sockets



For rectifier and other tubes with base diameter of 1.156". Socket is set at the bottom of a deep molded Bakelite shell. Heavy steel mounting plate molded into shell has 5/32" diam. mounting holes on 1-7/8" centers. Socket mounts from above or below in 1-1/2" round hole.

77A-4T 4 Contacts. Mica-filled \$1.51

Replacement Sockets

Regular "S" sockets, assembled with No. 4 retainer ring to steel mounting plate with slotted holes to fit mounting centers from 1-1/2" to 1-7/8".

Black				
Bakelite	List	Contacts	Steatite	List
78-RS4	\$.14	4 Contacts	49-RSS4	\$.48
78-RS5	.14	5 Contacts	49-RSS5	.48
78-RS6	.14	6 Contacts	49-RSS6	.48
78-RS7C	.18	7 Comb.		
78-RS7L	.14	7 Large	49-RSS7L	.61
78-RS7S	.14	7 Small	49-RSS7S	.48
78-RS8	.18	8 Octal	49-RSS8	.48
78-RS8L	.22	8 Loktal		
78-RS9	.22	9 Octal style		
78-RS11	.30	11 Octal style		



Floating Octal Sockets

Live rubber grommets fit into mounting holes to cushion this socket for vibration-free operation. Black bakelite dielectric. Mounts in 1-3/16" round hole above or below chassis. Two 1/4" screw holes on 1-1/2" centers.

Number	Description	List
77 - MIP - 8FK	Octal. Complete with 4 rubber grommets, 2 mounting screws, nuts and washers\$.39
11-3K	Kit for making floating connections using Amphenol MIP Sockets. 4 grommets, 2 mounting	
	screws, nuts and washers only	. 24

Tube Shield and Spring Assemblies



Number	Height	Description	List
5-401	1-3/8"	For 7 Pin Miniature Socke	ts \$.14
5-402	1-3/4"	For 7 Pin Miniature Socker	ts14
		101 and 5-402 are used with So 7-913, 147-925, 147-955 and	

 5-405
 1-1/2"
 For Noval Sockets
 .20

 5-408
 1-15/16"
 For Noval Sockets
 .24

 5-409
 2-3/8"
 For Noval Sockets
 .24

 Tube Shields No. 5-405, 5-408 and 5-409 are used with

MINIATURE 7 AND 9 PIN SOCKETS

List

ZIP-IN, Ethylon-A





Molded of Ethylon-A with high "Q" factor. Mounting plate has .136" diameter holes on 1-5/16" centers. Round chassis holes are 27/32" for 7 pin and 15/16" for 9 pin.

Number	Description L	ist
59-357	7 Pin. Without tube shield	
	base	.21
59-367	7 Pin. With tube shield base	.27
_)-359	9 Pin. Without tube shield	
	base	.51
59-369	9 Pin. With tube shield base	.61





Bakelite and Steatite Sockets

Sockets No. 59-369, 59-406 and 59-407.

Used for television, FM, auto radios, portables, etc. 147 Series mount in 5/8" chassis hole; mounting centers 7/8"; screw holes 1/8". 59 Series mount in 3/4" chassis hole; mounting centers 1-1/8"; rivet holes .095".

Bottom Mounting—No Tube Shield Base

	bottom Mounting—No Tube Shield Base				
	Number 147-500 147-501 59-409	7 7	Black Bakelite	.51	
<i>y</i>	59-409 59-410	9	Black Bakelite Mica-Filled Bakelite		
		Top Mounting	—With Tube Shield Base		
	147-905 147-913 147-925 59-406 59-407	7 7 7 9 9	Black Bakelite Mica-Filled Bakelite Steatite Black Bakelite Mica-Filled Bakelite	.40 .63 .56	
		Rubber Mount	ed—No Tube Shield Base		
	147-502	7	Black Bakelite	.25	
•		Rubber Mounte	d—With Tube Shield Base		
	147-955 147-963	7 7	Black Bakelite		

COAXIAL CABLES AND CONNECTORS . INDUSTRIAL CONNECTORS FITTINGS AND CONDUIT . ANTENNAS . RADIO COMPONENTS . PLASTICS FOR ELECTRONICS



Shielded Cable Connectors, 110—250 Volt

End Cable Outlet—For cables up to 1/2" diameter





Fully shielded cable terminals with black Bakelite connector units encased in a tight cap that fits securely and is easily removed. Available with cable connectors

relieves soldered connections of strain able with cable clamp that

protection	against a	brasion.	ubber gromi	nets for
With Cab			With Gron	ımet
	List	Description		List
60-F11	\$.66	3 Pole Receptacle	60-F4	\$.60
60-M11	.66	3 Pole Polarized Plug	60-M4	.60
61-F11	.54	2 Pole Universal Receptacle	61-F4	
61-M11	.54	2 Pole Standard Plug		.48
61-MP11	.54	2 Pole Standard Fing	61-M4	.48
01-141111	.34	2 Pole Polarized Plug	61-MP4	.48

Flush Motor Plug, 110-250 Volt

Neat, compact plug or receptacle set in type 61-61 steel shell for below surface mounting. Room for insertion of Amphenol End Cable Outlet Plugs.

Molded-In-Plate Receptacle





Same as 61-F Receptacle with standard steel mounting plate molded into the Bake-lite body. Mounts in 1-3/16" chassis hole; two 5/32" screw holes on 1-1/2" centers.

No. 61-MIP-61F 2 Pole Universal Receptacle.....List..... \$.30

Miniature Cable Connectors







Long

For shielded or unshielded cables having up to 6 conductors. Black Bakelite elements are housed in cadmium plated brass shells and are held in place by side set screws. Polarized contact spacing makes incorrect insertions impossible. Accommodates cable up to makes incorrect 1/4" diameter.

	Short Si	1ell — 13/16"	Long	
Male 91-MPM3S	List \$.36	Description 3 Contact	Female 91-MPF3S	List \$.36
91-MPM4S	.40	4 Contact	91-MPF4S	.40
	Long She	II—1-3/16" L	.ona	
Also use with	shielded chas	sis units show	n below.	
91-MPM3L	\$.36	3 Contact	91-MPF3L	\$.36
91-MPM4L	.40	4 Contact	91-MPF4L	.40
91-MPM5L 91-MPM6L	.45 .45			
Note:	.45			
		Flared Shell	—1-3/16" Long	
Use long shell shielded chass			91-MPF3	\$.36
either long or			91-MPF4	40
with unshielde				
as 78-S3S an	d 86-CP-3S.			

Shielded Chassis Units



Economical chassis receptacles for connecting shielded or unshielded cables having from 2 to 6 conductors (for 2 wire cable use 3 contact unit and leave 1 contact unwired). Black Bakelite element; steel mounting plate. Can be mounted on surface or behind chassis or panel in 7/8" D. hole; 5/32" screw holes on 1-1/4" centers. Use with long shell cable connector above for a fully shielded connection.

Female	Description List
78-PCG3F	3 Contact\$.36
78-PCG4F	4 Contact
78-PCG5F	5 Contact
78-PCG6F	6 Contact



Alignment Tool

Made of Amphenol 912-A polystyrene. Has no capacity effect when aligning critical circuits. A necessary tool for anyone who must make adjustments on high frequency circuits.

U.H.F. Alignment Tool (minimum order 24)List \$.25 Illustrated above is the colorful sales card on which are mounted 24 Amphenol Alignment Tools.

No. 55-024 Sales Card with 24 Alignment Tools. List \$6.00

Shielded Multi-Wire Cable Connectors



Multi-wire cable connectors consist of Amphenol "S" type tube sockets and "CP" plugs. Metal cap shields connections and provides an unbreakable cover for cable termination. Cap may

be removed with an ordinary screw-driver. Accommodates cable up to 7/16" diameter. Female chassis receptacles or sockets 78-S, 78-RS and 77-MIP; male receptacles are listed below.

With Rubber Grommets

With Rubber Grommet Type Plug Cap 3-13.

• • •		-		
Female	List	Contacts	Male	List
78-PF4	\$.31	4 Contact	86-PM4	\$.31
78-PF5	.31	5 Contact	86-PM5	.31
78-PF6	.31	6 Contact	86-PM6	.31
78-PF7L	.31	7 Large	86-PM7L	.31
78-PF7S	.31	7 Small	86-PM7S	.31
78-PF8	.35	8 Octal	86-PM8	.35
78-PF9	.39	9 Octal Style	86-PM9	.39
78-PF11	.47	11 Octal Style	86-PM11	.47

With Cable Clamps

With positive grip Cable Clamp Type Plug Cap 3-24.				
78-PF4-11	\$.37	4 Contact	86-PM4-11	\$.37
78-PF5-11	.37	5 Contact	86-PM5-11	.37
78-PF6-11	.37	6 Contact	86-PM6-11	.37
78-PF7L-11	.37	7 Large	86-PM7L-11	.37
78-PF7S-11	.37	7 Small	86-PM7S-11	.37
78-PF8-11	.41	8 Octal	86-PM8-11	.41
78-PF9-11	.45	9 Octal Style	86-PM9-11	.45
78-PF11-11	.53	11 Octal Style	86-PM11-11	.53

Male Receptacles

Extremely compact. Held firmly in place by Amphenol patented retainer ring. Can be rotated to line up contacts for shortest possible leads. Nickel-plated steel mounting plate has slotted screw holes centers from 1-1/2 to 1-7/8".



Number	Contacts List
86-RCP4	4 Contact
86-RCP5	5 Contact
86-RCP6	6 Contact
86-RCP-7L	7 Large
86-RCP-7S	7 Small
86-RCP8	8 Octal
86-RCP9	9 Octal Style
86-RCP11	11 Octal Style

Female plugs are shown above, other styles can be made by assembling type sockets with plug caps.

Rubber Plug Handle



End cable outlet receptacles or plugs (PF and PM or 61-F4 types) snap into this rubber handle and are held securely in place by a live rubber inner molded shoulder. Illustration is cut away to show how connector is gripped by plug handle.

3-RPH Plag Handle Only.



AMERICAN PHENOLIC CORPORATION

16" TV TUBE MOUNTING **ACCESSORIES**

For metal and glass tubes



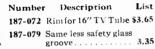
Tube mounting bracket for tube protection in shipping and vibra-tion-free reception — live rubber cushions. Base is molded of polystyrene and holding straps are of fibre laminated phenolic. Easily attached to chassis or cabinet.

155-360 16" Tube Mtg. Bracket List \$7.30 ea.



Cross-section

Molded Polyethylene Rim provides a superior mounting using conventional methods. Better protection for tubes and adequate insulation especially where the rim is joined The unique overlapping provides long creepage paths. Heavy, uniform wall thickness. Outer groove provides for safety or masking glass.



Receptacle Shells



ACS Shell extends "CP" or "S" type sockets or plugs 13/16" above or below surface. 4 knockouts sides. Mounts in 1-3/4" hole; has 3 notched holes for No. 6 screws

Number	Description	List
23-1S	For small "S" Sockets\$.12
23-1I.	For large "S" Sockets	.12

61-61 Shell. Nickel plated steel shell, lowers bottom of "CP" and "S" type plugs and sockets and 60 and 61 con-nectors 1-3/16" below surface. Mounts in 1-7/16" hole; two 5/32" screw holes on 1-3/4" centers.



.....List \$,18 No. 61-61 Shell only

Tip Jacks

Molded of Bakelite in black or red. Mount in $3/8^{\prime\prime}$ hole with retainer ring included. Use standard phone tips for 78-1P1, and 78-1 Contacts recessed 1/8" The body may be used as a feed-thru.

	Number	Description 1	ist
	78-1S	For 3/32" Plug\$.09
-	78-1L	For 5/32" Plug	.09
	78-1M		.09
	78-1P		.09
201	78-1P1	High Voltage for .080	
2		Phone Tip. Mounts in 1/2"	
0		hole	.12

Single Prong Plugs

Bakelite Plugs, black or red, for use with Tip Jacks above.

Number	Description	List
71-1S 71-1M 71-1L	For 3/32" Socket	.06

Inserts and Shells for Cable Plugs, Connectors and Receptacles. For Assembly into Type Required

Receptacles



> "S" Socket (Listings on page 4).

61-F

60-F

For 110-250 Volt Plugs and Receptacles

Compact in design, molded from high dielectric black Bakelite. Rated at 15 amp., 110 v. or 10 amp., 250 v. Two-pole type accepts any standard electric plug. Retainer ring type mounts in 1-11/64" keyed hole as punched by Tools 25-LD-1 Mounting plate type requires 1-9/32" D. chassis hole; has

slotted screw holes on 1-1/2 to 1-7/8" centers—Mounting plate type is similar to Type "RS" Replacement Sockets,

Retainer Ri	ng Type	Description	With Mount	ing Plate
Number	List		Number	List
61-F	\$.30	2 Pole, Universal3 Pole, Polarized	61-F1	\$.34
60-F	.42		60-F1	.46
		Plugs		7 (10) A
Retainer R	ing Type	Description	With Mount	ing Plate
Number	List		Number	List
61-M	\$.30	2 Pole, Standard	61-M1	\$.34
61-MP	.30	2 Pole, Polarized	61-MP1	.34
60-M	.42	3 Pole, Polarized	60-M1	.46

For Multi-Wire Plugs and Receptacles

For quick, easy assembly to chassis or panels from 19 to 16 gage (.044 to .062") using Amphenol retainer ring. Black Bakelite or steatite. Cadmium plated socket contacts for easy soldering; plug prongs are nickel plated brass; rotation feature for lining up contacts. Complete with retainer ring.

Can be assembled in any of the plug caps or receptacle shells below. For chassis mounting in 1-11/64" keyed hole as punched by Tools 25-LD-1.

"CP" Plugs

Black Bakelite	List	Contacts	Steatite	List
86-CP4	\$.13	4 Prong	49-245-00	\$.49
86-CP5	.13	5 Prong	49-255-00	.49
86-CP6	.13	6 Prong	49-265-00	.49
86-CP7L*	.13	7 Large		
86-CP7S	.13	7 Small		
86-CP8	.17	8 Prong, Octal	49-285-00	.49
86-CP9	.21	9 Prong, Octal Style		
86-CP11	.29	11 Prong, Octal Style		
* Mounts in 1	-21/64" keyed	hole. Use 25-LD-2.		

Plug Caps for Every Purpose





"CP" Plug







3-17

Cable terminals can be assembled with these plug caps, using retainer ring type plugs, sockets and 60 and 61 series shown above. Plug caps are designed to fit all but the 7-large and 7-combination sizes. For 7-large and 7-comb. use Plug Cap 3-13L shown below.

Number	Length	End Hole	Side Hole	Grommet	List
3-10	1"	None	None	None	\$.18
3-12	1"	5/16"	None	Metal	.18
3-13	1"	7/16"	None	Rubber	.18
3-17	1"	None	7/16"	Rubber	.18
3-24	Can with Cable C	lamp attached. Ac	commodates cables	s to 1/2"	
79-CC4	Cable Clamp only	. Same as used on	Cap 3-24		12
3-13L	Cap for large 7 Se	ocket and Plugs,	end rubber gromn	net 7/16" ID	



Crystal Holder Socket

for crystal holders having 2 prongs on 3/4" centers. Easily mounted. May be used as dual tip jacks on test panels. Molded of mica-filled Bakelite. Number Description List 33-2T For 1/8" Prongs...\$.17 For 5/32" Prongs.

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Heavy Duty Power Plugs

Male unit has four heavy brass blades; female has heavy phosphor bronze contacts. For use with current loads up to 15 amperes at 125 volts or 10 amperes at 250 volts. Molded black Bakelite unit is enclosed in tight, heavy brass shell . . . bright cadmium plated. Polarized with shell keys and keyways. Strain is taken up by concealed cable clamp. Grounding screw in body for safe wiring. Threaded locking ring keeps shells tight.

Chassis or panel receptacle mounts in 11/4" hole in any material up to 1/2" thick. Complete with lock washer, spacer washer and nut.







Receptacle

Mating parts are arranged in same horizontal line below.

92-M	Male	\$3.01	92-F	Female	.\$3.01	92-C	Contacts Female Male	\$3.01

Jack



Flush Receptacles

Flush receptacles may be made up of above receptacles and steel yoke for mounting in regular wall switch boxes. Full open end will come thru wall plate 1/8" to grip locking ring.

Number	Description	List
92-12 79-CCC8	Cadmium plated steel yoke only. With mtg. screws	.18 .61

Heavy Duty Radio Connectors

The plugs shown in bold face type mate with jacks and receptacles listed in bold type in the same horizontal line. For numbers in light faced type follow the same procedure... plugs mate with jacks and receptacles in the same horizontal line. Bold type also designates the most popular units.



PI	ug 1	Jo
Male	Female	Femal
9-04M	79-04F1	79-04F
9-05M	79-05F1	79-05F
9-06M	79-06F1	79-06F





[PI	ug 🕴	Jack	Receptacle	1 1
Contacts		Female	Female Male	Female Male	List
4	79-04M	79-04F1	79-04F 79-04M1	79-P04F 79-P04M	\$1.51
5	79-05M	79-05F1	79-05F 79-05M1	79-P05F 79-P05M	1.51
6	79-06M	79-06F1	79-06F 79-06M1	79-P06F 79-P06M	1.51
8	79-08M	79-08F1	79-08F 79-08M1	79-P08F 79-P08M	1.51
12	79-012M	79-012F1	79-012F 79-012M1	79-P012F 79-P012M	2.41



Bulb Tester and Tube Socket

Standard 7 contact combination socket for large and small 7 prong tubes.

ror testing	miniature builds, either screw or bayonet types.	
Number	Description	List
78-7CD	With retainer ring	\$.53



Adapters

A simple way to make adapter units which may be used for modernizing tube checkers and analyzers, adapting new tubes to old circuits and for connections to output meter, phonograph pickup, etc.

for connec	tions to output	meter,
S	ocket Tops O	nly
Number	Contacts	List
44-8	8 Octal	.24

ture tubes. 44-9 9 Noval .45

For testing new 9 pin minia

Shell Only Of metal tubing for snap-in connection on either end of Amphenol "S" type sockets or "CP" plugs. Combinations possible from 4 to 11 prongs or contacts. No. 3-14D With side hole, rubber grommet.

.....List \$.24

Number

50-8SG

supplied with bases.



Molded Speaker Plugs

Prongs are securely molded into one-piece black bakelite body. Each prong is deeply set into individually molded pocket, eliminating the possibility of shorts in case of pull-back of wire insulation.

With Finge	г		With Straig	ht	
Grip	Prongs	List	Sides	Prongs	List
71-4	4	\$.13	70-8	8	\$:17
71-5	5	.13	70-9	9	.21
71-6	6	.13	70-12	12	.30
71-7	7	.13	70-20	20	.61

Miniature Plugs



Cable Type used extensively for speaker connections in compact midgets. Ideal for all plug-in connections where space is limited. Brass prongs are deeply recessed in molded pockets

eventing shorts due to insulation pulling back. With molded finger grip. Use with miniature sockets.



Chassis Type mounts in plain round 5/8" hole. No screws or rivets required. Held firmly by retainer ring included. Use with female miniature connectors (MPF type).

Cable Type	List Price	Description	Chassis Type	List
71-3S	\$.15	3 Prong	86-CP-3S	\$.15
71-4S	.15	4 Prong	86-CP-4S	.15
71-5S	.21	5 Prong		
71-6S	.21	6 Prong		

Rectangular Plugs and Sockets



For compact apparatus. Plugs are often used as a supported type self-sustaining coil form.

Style B	Num ber
38 9310	70-25 70-26
88 88	77-26

Style C

Num-Prongs or Style Contacts ber List 70-25 В 3 70-26 B .18

Tap Change Switch



An 8-position single pole continuous switch with white markings clearly visible in window cap. Side set screw locks switch arm in position preventing accidental tap changes.

Number	Description		
36-1 36-2	With numerals 1 to 8\$ With impedance markings 0-2-	.90	
	4-8-16-250-500	.90	

Universal Grid Cap



A grid cap of improved design for universal use with tube grid caps from ¼ to ¾ diameter including standard glass and metal tubes. Spring brass con-

tacts in phenolic body.

Unwired Grid Cap List Price \$.18

Bases Only With side stud accommodating a metal tube grid cap clip. Both tops (left) and bases are drilled for self-tapping screws which are

Prongs

8 Octal

List

.36

.30



AMERICAN PHENOLIC CORPORATION 1830 SOUTH 54TH AVENUE, CHICAGO SO, ILLINOIS

Series 75 Microphone Connectors—Single Contact

Fit almost every microphone. Standard with leading manufacturers for many years. Compact, rugged, neat. Chassis receptacles are integral parts of microphones using single conductor cable. Widely used in amplifiers, transmitters, phonoelectric devices, home recorders and similar equipment. They are also suitable for connecting various units such as PM speakers, headphones, and for theft alarms or wall type coin operated

In the 75 Series, plugs mate with all cable jacks and receptacles. Circuit closing contacts are the same except that they close the circuit when plug is disengaged, eliminating open circuit grid howls.

Locknut Receptacles mount in .385" holes when grounding to chassis and $\frac{1}{2}$ " holes for ungrounded 2 circuit applications.





Straight Plug

75-MC1F Flush

Contact







Cap and Chain



Seals open chassis units against dirt and dust. Also used with 80 Series Connectors. 75-CCC1.. List \$.55 Cl. Cr. Closed Circuit.



75-MC1FA Angle Plug

Contact

75-MC1F-A Flush \$.66

List

75-MC1F

75-MC1M Cable Jack Contact List

Flush

\$.44

Locknut Receptacies Contact List \$.33 75-PC1M 75-CL-PC1M Flush Cl. Cr. .44

Phone Plug Adapter

List

\$.55

75-MC1M

Screws into coupling ring of 75-MC1F and 75-MC1F-A plugs, permitting the cable to be plugged into any standard phone jack. No soldering or wiring.

75-MC1P.....List \$.49

Microphone Switch

Threaded on one end, coupling ring on the other end. For 75 Series Connectors. May be connected directly to any mike equipped with 75-PC1M or similar receptacle. Pushto-talk or slide button for permanent con-

75-MC1S..... List \$1.10



Series 80 Microphone Connectors—Single and Double Contacts



90 MC2N



80-MC2F



80	-MC2M		00.11.0					
	Plugs		Cable	Jacks		Lockn	ut Recepto	cles
	Contacts	List	Con	tacts	List		ontacts	List
			SINGLE	CON	TAC	\overline{T}		
80-M	M	\$.71	80-F	F	\$.71	80-C	F	\$.44
80-F1	F	.71	80-M1	M	.71	80-C1	M	.44
			TWO C	ONT	ACTS	3		
80-MC2	м м	.88	80-MC2F	F	.88	80-PC2F	F	.49
80-MC2		.88	80-MC2M1	M	.88	80-PC2M	M	.49

Series 80 Cable Connectors are designed for shielded cables; for single and two conductor coaxial cables, microphone cables; for twisted pairs, concentric lines, photo cell leads, patch cords and similar uses. Suitable for connecting model railroad equipment, pin ball games and other small electrical apparatus. Elements are high dielectric black Bakelite. Receptacles mount in 5/8" chassis holes. Maximum chassis thickness for locknut type receptacles is 11/32"

Mating families of connectors are listed in horizontal lines.

The most popular connectors are shown in bold face type

Cap and Chain required is 75-CCC1.

M Male. F Female.

Series 91 Microphone Connectors—3 and 4 Contacts

Extensively used on all types of portable apparatus, these connectors were designed primarily to use with microphones. Some of the advantages of Amphenol Microphone Connectors...

• Accidental disconnections are eliminated by a positive screw-type

connection. • Incorrect insertions are impossible because connectors are polarized Pulling and twisting strain on soldered contacts is eliminated because a squeeze-type clamp grips cable securely after assembly.

Chassis receptacles mount in 27/32" chassis holes. Maximum chassis thickness for chassis receptacle is 1/8".

Mating families of connectors are listed in horizontal lines.







91-PC3F

Plugs		Cable .	Jacks	: ()	Chassis Receptacles		cles	
Contacts List			Contacts List		C	ontacts	List	
91-MC3M 91-MC3F1	M F	\$1.10 1.10		F M	TACT \$1.10 1.10	S 91-PC3F 91-PC3M	F M	\$.55 .55
91-MC4M1 91-MC4F1	M F	1.20 1.20	FOUR C 91-MC4F 91-MC4M1	ON7 F M	1.20 1.20	91-PC4F 91-PC4M	F M	.60

The most popular connectors are shown in bold face type. F Female. M Male.



Side Cable Outlet

Provide an outlet for microphone cable where it is not practical to run the cable thru the stand. For use between microphones and stands having 5/8-27 threads.

91-SCO3.....List \$. 82

Cap and Chain

For 91 Series Connectors. Same construction and material as No. 75-CCC1.

No. 91-CCC3..... List \$.55

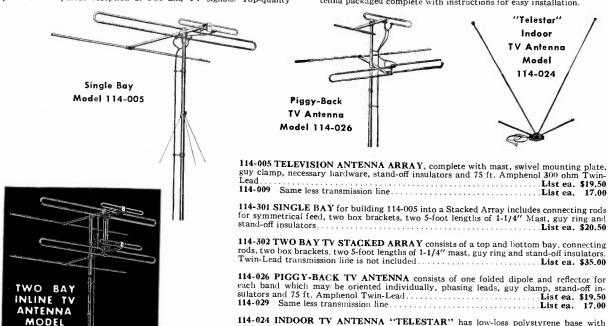
COAXIAL CABLES AND CONNECTORS . INDUSTRIAL CONNECTORS, FITTINGS AND CONDUIT . ANTENNAS . RADIO COMPONENTS . PLASTICS FOR ELECTRONICS



Television Antennas

Engineered and perfected in the Amphenol Antenna Development Laboratories, the antennas illustrated and described on this page will provide unsurpassed reception of FM and TV signals. Top-quality

materials, rugged construction and the latest in design are incorporated into each Amphenol antenna to provide perfect performance. Each antenna packaged complete with instructions for easy installation.

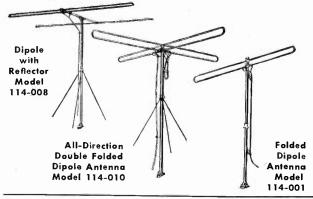


114-024 INDOOR TV ANTENNA "TELESTAR" has low-loss polystyrene base with

rubber feet to protect furniture. Light weight aluminum rods are pre-tuned for receiving all channels. Five-foot natural color polyethylene 300 ohm Twin-Lead is included.

List ea. \$4.95

17.00



FM Antennas

114-008 DELUXE FM FOLDED DIPOLE WITH REFLECTOR, complete with mast, mounting plate, insulators, guy clamp, hardware and 75 ft. Amphenol 300 ohm Twin-Lead.......................List ea. \$16.25 114-023 Same less transmission line.....List ea. 12.65

114-010 DELUXE FM ALL-DIRECTION DOUBLE FOLDED DI-POLE ANTENNA, complete with quarter-wave phasing stub, mast, mounting plate, guy clamp, hardware, insulators, and 75 ft. Amphenol 300 ohm Twin-Lead..... List ea. \$16.25 114-015 Same less transmission line......List ea. 12,65

114-001 FM FOLDED DIPOLE ANTENNA, complete with mast, swivel mounting plate, insulators, guy clamp, necessary hardware and Dipole 75 ft. Amphenol 300 ohm Twin-Lead List ea. \$12.25 114-012 Same less transmission line......List ea.

Twin Lead Folded Dipole Amateur Antennas

The finest ready-made amateur transmitting antenna ever developed. Ready-cut to the four most popular bands. Broadband characteristics. Excellent for your regular transmitting antenna, as an auxiliary antenna or for portable or field day use. Flat top portion is Amphenol 14-022 with copper clad steel conductors, 75 foot lead-in is Amphenol 14-056 joined to top with molded "T" junction. Packaged complete with easy installation instructions.

A real DX antenna, cut-toband, in use by thousands of amateurs.



Amphenol			Antenna		
Number	Frequency	Band	Length	Price	
139-813	28 mc	10 Meters	18 feet	\$ 7.70	
139-815	14 mc	20 Meters	35 feet	9.60	
139-816	7 mc	40 Meters	70 feet	13.50	
139-817	3.5 mc	80 Meters	135 feet	20.75	

AMERICAN PHENOLIC CORPORATION

114-302



AMERICAN PHENOLIC CORPORATION



Convenient, efficient Amphenol Twin-Lead is the first choice of amateurs for construction of antennas and transmission lines. It transmits signals with minimum losses . . . it's durable . . . inexpensive . . . simple to install . . . repels water . . is unaffected by acids. alkalies and oils because the dielectric is Amphenol Polyethylene. Remains flexible at —70°C. and after continuous aging in sunlight.

Receiving Twin-Lead*

300 ohm Twin-Lead for FM and TV Antennas 1000 f	
300 Olim I will Depa for I in and I i internal	٠.
14-056 (500) & (1000) Standard, brown polyethylene	00
insulation\$32.	w
14-318 (500) & (1000) White semi-clear polyethylene for	
indoor TV 32.	00
14-271 (500) & (1000) Tubular for deluxe FM and TV 83.	50
150 ohm Twin-Lead for experimental work	
14-079 (500) & (1000) Reels of 500 and 1000 feet 36.	00
75 ohm Twin-Lead for lower impedance applications	
14-080 (500) & (1000) Reels of 500 and 1000 feet 33.	00
A . T . TOTAL LANGUAGE TO A . A TOTAL LANG	*
Amateur Transmitting and Copper Clad Types of Twin-Lea	•
List p	
75 ohm Twin-Lead for transmitting, rated 1 KW RF power Fo	ot
14-023 (500) & (1000) Reels of 500 and 1000 feet \$	12
300 ohm Tubular Twin-Lead rated 1 KW RF power	
do dim racam ram sees tated ram at posses	

14-076 (500) & (1000) Reels of 500 and 1000 feet 300 ohm Extra-Strength Twin-Lead with copper clad conductors

14-022 (500) & (1000) Reels of 500 and 1000 feet.









14-022

Antenna Accessories

Stand-Off Insulators







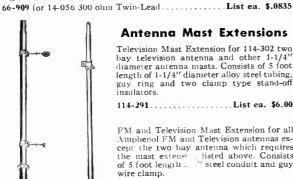
Screw eye insulators have low-loss polyethylene inserts. Twin-Lead types accommodate 14-056, 14-079 and 14-080. Coax types accommodate coax and other cable not exceeding 1/2" diameter. Wood screws are No. 14 and machine screws have 10-32 thread.

ATTIMINED !

Twin-Lead Type Coax or Tubular Type List List

Wood Screws 66-202 3" length.ea. \$.06 66-209 7\%" lgth.ea. .09
Mach. Screws 66-204 3" length.ea. .08
66-210 7\%" lgth.ea. .12 66-201 3" length.ea. \$.07 66-208 7 ½" lgth.ea. .10 66-203 3" length .ea. .09

Polystyrene stand-off insulators space Twin-Lead 1-5/16" from mounting surface. Perfect insulation.



Antenna Mast Extensions

Television Mast Extension for 114-302 two bay television antenna and other 1-1/4" diameter antenna masts. Consists of 5 foot length of 1-1/4" diameter alloy steel tubing, guy ring and two clamp type stand-off insulators.

114-291.....List ea. \$6.00

FM and Television Mast Extension for all Ampliend FM and Television antennas except the two bay antenna which requires the mast extension is listed above. Consists of 5 foot length ... " steel conduit and guy wire clamp.

114-300.....List ea. \$3.00

Remote Control Wire

For wiring antenna rotators and other low voltage remote controls such as miniature electric trains. Recommended for circuits up to 28 volts. For easy wiring, each conductor with its insulation may be ripped apart without exposing the conductor. Conductors are 7/28 copper wire with one conductor timed to feelilitate training. High dialectric solutions. tinned to facilitate tracing. High dielectric polyethy-lene insulation is weatherproof.

List per 1000 ft.

14-316 (500) & (1000) Reels of 500 and 1000 ft....\$45.00 3 conductor 14-298 (500) & (1000) 4 conductor Reels of 500 and 1000 ft.....50.00 14-317 (500) & (1000) Reels of 500 and 1000 ft..... 57.70

Polystyrene Line Spreaders



5 conductor

For separating feeder lines and construction of folded dipole antenna from wire. Wire holes .085" diameter.

4" spacing 6" spacing 2" spacing 66-205. List ea. \$.15 66-206. List ea. \$.20 66-207. List ea. \$.25

Lightning Arrestor For Antennas

Attaches to 14-056 300 ohm Twin-Lead without cutting the conductors. Designed to meet the requirements of the Underwriters' Laboratories. Molded of high grade electrical phenolic with conducting plate and gap molded in. Precise gap spacing is maintained. Self contained also is a high resistance shunt permanently sealed against moisture. Overall dimension 1-7/8"x2"x3/4".

155-338.....List ea. \$1.40



COAXIAL CABLES AND CONNECTORS . INDUSTRIAL CONNECTORS, FITTINGS AND CONDUIT . ANTENNAS . RADIO COMPONENTS . PLASTICS FOR ELECTRONICS





RG-5/U 21-001

50 ohm Coax Cable with medium size, solid copper conductor, double copper shield and black vinyl jacket.



black vinyl jacket.



70 ohm Coax Cable with medium size, stranded tinned-copper conductor, single copper shield and black vinyl jacket.

RG-22/U 21-038 95 ohm Twinax Cable with two small size, stranded copper conductors, single tinned-copper shield and black vinyl jacket.



95 ohm Twinax Cable with two medium size stranded copper conductors, single tinnedcopper shield and black vinyl jacket.

RG-58/U 21-024

50 ohm general purpose Coax Cable with a small size, solid copper conductor, single tinnedcopper shield and black vinyl jacket.

Amphenol Coax and Twinax RG Cables

Fully approved and produced in accordance with Army-Navy specifications (JAN-C-17A). These specifications utilize the very fine dielectric properties of polyethylene, proven most efficient as a low-loss, flexible, mechanically stable dielectric. The outer jacket in most of Amphenol's approved types is tough, resistant vinyl ... protective, nonhygroscopic, and impervious to exposure to acids, alkalis, oils and gasoline. Polyethylene is also used as outer jacket for some of the types listed.

Polyethylene is processed in strict accordance with Bureau of Ships Specification RE-9172. It should be emphasized that unusally strict standards are applied to every operation in the processing of Amphenol's RG cables. Rigid laboratory tests and process checks, plus Amphenol's "OK" certification and notarized affidavit on every unit shipment is final assurance of extra quality and dependability.

Polyethylene Characteristics Špecific Gravity 92 Water Absorption .005% Cold-Brittleness -70° C Dielectric Constant, 60 cycles to 100 mc 2.29 Power Factor, 60 cycles to 100 mc .0004 Volume Resistivity, ohm-cm 10¹³ Softening Temperature, transparency point 10³-105° C

RG Cables

Chart shows characteristics and dimensions of RG Cables manufactured by Amphenol. Further specifications and prices on request. Impedance subheads below are approximate...for the purpose of grouping. Nominal impedance is shown in the third column.

	· · · · podamoo ro ono · · · ·	siic siiid colaiiiii
abbreviations used in chart:	C—Copper CW—Copperweld N—Nichrome	Poly. —Polyethylen S —Silvered Copper T—Tinned Copper

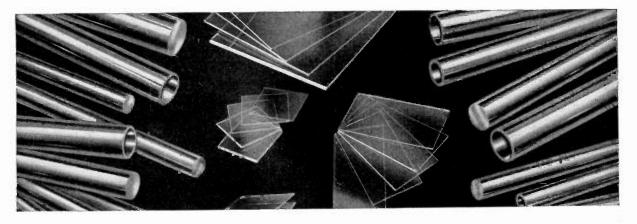
Ampheno No.	Army- l Navy No.	Nom- inal Imped- ance	Nom- inal mmf ft.	Con- ductor Wire Size	Di- elec- tric O.D.	Inner Shield		Vinyl Jack- et	Jacket O.D.	List per Foot
			5	0 Ohm	Group	,				
21-018 21-024 21-199 21-023	RG-29/U RG-58/U RG-58A/U RG-55/U	53.5 53.5 52 53.5	28.5 28.5 28.5 28.5	20 20 190073 20	.116 .116 .116 .116	T T T	Ť	Poly. Black Black Poly.	.184 .195 .195 .206	.13 .11 .13 .25
21-001 21-017 21-004 21-006†	RG-5/U RG-21/U RG-8/U RG-10/U	52.5 53 52 52	28.5 29 29.5 29.5	16 16N 7-21 7-21	.185 .185 .285 .285	C S C C	S S	Black Grey Black Grey	.332 .332 .405 .405	.25 .46 .22 .39
21-005 21-231 21-010 21-041†	RG-9/U RG-9A/U RG-14/U RG-74/U	51 51 52 52	30 30 29.5 29.5	7-21 S. 7-21 S. 10	.280 .280 .370 .370	s S C C	C S C C	Grey Grey Grey Grey	.420 .420 .545 .545	.46 .46 .46
21-013 21-014† 21-015 21-016†	RG-17/U RG-18/U RG-19/U RG-20/U	52 52 52 52	29 29 29.5 29.5	.188 .188 .250 .250	.680 .680 .910 .910	C C C		Grey Grey Grey Grey	.870 .870 1.120 1.120	1.33 1.66 2.24 2.62
21-022	RG-54A/U	58		0 Ohm	Group	Т		Poly.	.250	.16
- -				0 Ohm			• •	2 0.9.	.200	.10
21-025 21-002 21-007	RG-59/U RG-6/U RG-11/U	73 76 75	21 20 20.5	22 CW 21 CW 7-26 T	.146 .185 .285	C S C	Ċ	Black Grey Black	.242 .332 .405	.13 .37 .22
21-008† 21-009 21-011 21-019	RG-12/U RG-13/U RG-15/U RG-34/U	75 74 76 71	20.5 20.5 20 21.5	7-26 T 7-26 T 15 CW 7-21	.285 .280 .370 .455	CCC	C C	Grey Black Black Black	.405 .420 .545 .625	.39 .39 .48 .48
21-020† 21-125**	RG-35/U	71 72	21.5 21.5	9	.680 .680	C		Grey Grey	.870 .870	1.66 1.33
	90 Ohm Group									
21-029* 21-026* 21-003* 21-038 21-039	RG-71/U RG-62/U RG-7/U RG-22/U RG-57/U	93 93 97.5 95	17 Tw		.472	T C C T T		Poly. Black Black Black Black	.250 .242 .370 .405 .625	.28 .14 .28 .24 .54
* Semi-solio	l Dielectric	** RC	35/U	less armo	r †	Armore	d Cable			

AMERICAN PHENOLIC CORPORATION



AMERICAN PHENOLIC CORPORATION

Polystyrene, Polyweld and Coil Forms



BECAUSE of its low-loss factor, Amphenol POLYSTY-RENE is used extensively for sockets, insulators and dielectrics in the very-high, ultra high and super high frequency

fields. Further, it is colorless and transparent and does not deteriorate with age. Continuous exposure to sunlight affects its clarity only slightly.

"912-A" Polystyrene Rods

Supplied in $12^{\prime\prime}$ and $48^{\prime\prime}$ lengths as shown below. Also available in diameters from $1.1/8^{\prime\prime}$ to $4.1/2^{\prime\prime}$ in $12^{\prime\prime}$ lengths or in lengths up to $48^{\prime\prime}$.

	List 12"	Diam-	L	ist 48′′
Number	Lgth.	eter	Number	Lgth.
19R125	\$.04	1/8"	19R125-48	\$.15
19R187	.08	3/16"	19R187-48	.31
19R250	.13	1/4"	19R250-48	.51
19R312	.20	5/16′′	19R312-48	.77
19R375	.29	3/8"	19R375-48	1.11
19R500	.52	1/2"	19R 500-48	2.00
19R625	.81	5/8′′	19R625-48	3.12
19R750	1.15	3/4"	19R750-48	4.49
19R875	1.59	7/8"	19R875-48	6.16
19R1000	2.15	1''	19R1000-48	8.29

"912-A" Polystyrene Tubes

Tolerances maintained suitable for radio coil form and electronic applications . . . supplied in 12" and 48" lengths in various diameters as shown. Wall thickness is 1/16".

			•			
List 12" Overall List 48"						
Number	Lgth.	Diamet	er Number	Lgth.		
19T1-062	\$.10	3/16"	19T1-062-48	\$.40		
19T2-062	.15	1/4"	19T2-062-48	.55		
19T3-062	.20	5/16"	19T3-062-48	.75		
19T4-062	.25	3/8′′	19T4-062-48	.95		
19T5-062	.35	1/2"	19T5-062-48	1.35		
19T6-062	.45	5/8"	19T6-062-48	1.75		
19T7-062	.55	3/4"	19T7-062-48	2.15		
19T8-062	.75	1"	19T8-062-48	2.95		

"912-A" Polystyrene Sheet Stock

Optical clarity suitable for dial window and gage glass applications.

Number	Size	List per Sheet		
19-0628	4"x8"x1/16"	\$.28		
19-0938	4"x8"x3/32"	.34		
19-1258	4"x8"x1/8"	.40		
19-1878	4"x8"x3/16"	.50		
19-2508	4''x8''x1/4''	.67		

Amphenol POLYWELD "912"

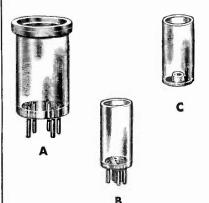




Amphenol POLYWELD "912", colorless, transparent and ready-to-use, is pure polystyrene in solution. Matchless for "doping", coating, impregnating or sealing for radio frequency, ultrahigh frequency, very-high frequency or general electronics applications. Used as an adherent, POLYWELD joins two sections of polystyrene. It contains solvents which will actually "weld" the surfaces of polystyrene into a single unit of uniform tensile strength.

Description	Polyweld "912"	List
2 oz. Bottle	53-912-2	\$.50
4 oz. Bottle	53-912-4	.65
Pint Container	53-912-P	2,25
Quart Container	53-912-Q	4,00
1 gallon Can	53-912-G	13.35
Description	Thinner	List
2 oz. Bottle	53-916-2T	\$.25
4 oz. Bottle	53-916-4T	.35
Pint Container	53-916-PT	.50
Quart Container	53-916-OT	.80
1 gallon Can	53-916-GT	2.00

Amphenol 912-A Polystyrene Coil Forms



Plug-In Coil Forms - A

Prong spacing fits standard tube sockets. Diameter of coil 1½"; length of body 2½"; Impregnate wound coils with Amphenol "912" Polyweld.

Number	Description L	ist
24-5P 5	Prong	.66

Miniature Plug-In Coil Forms - B

For transceivers, low power transmitters and UHF receivers.

No. 24-6H 6 Prong. List \$.48

Miniature Coil Forms - C

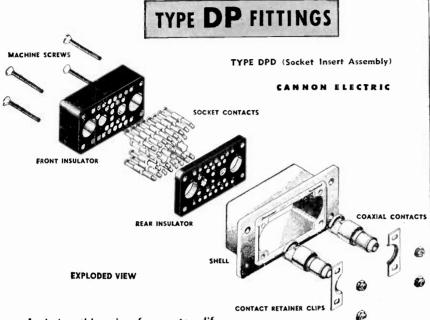
Raised hole in center of base for self-tapping screw. No. 24 3/4" OD, 1-9/16" long..List \$.18

COAXIAL CABLES AND CONNECTORS . INDUSTRIAL CONNECTORS, FITTINGS AND CONDUIT . ANTENNAS . RADIO COMPONINTS . PLASTICS FOR ELECTRONICS





CANNON ELECTRIC DEVELOPMENT COMPANY . 3209 HUMBOLDT STREET, LOS ANGELES 31, CALIFORNIA



In design, this series of connectors differs from the majority of Cannon Connectors. Type DP Fittings are rectangular in shape, and polarization is affected by the arrangement of the contacts within the connectors. A wide variety of contact arrangements is available with contacts ranging from 10-amp. to 40-amp. capacity and with low impedence Coaxial contacts of 10-amp, capacity providing for continuous shielding available in some types. Standard shells are aluminum finished in sand blast and clear lac-

quer; some types are available in zinc, sand blast and clear lacquer finished. Contacts are brass, silver-plated. Insulation is phenolic, with specially treated low moisture absorbtion ceramic insulation used in coaxal contacts. Leading uses of the Type DP connectors are in rack and panel instrument and radio equipment where weight and space saving are important factors. A BULLETIN ON DP CONNECTORS IS AVAILABLE ON REQUEST.

TYPE "DPD" RECEPTACLES (With Socket Insert)



Mounting flange is 3%" x 11%" and shell extends %%" from the from the mounting surface for face forward Coaxial con-

Coaxial contacts extend \$\frac{42}{12}\] to the rear from the mounting surface. Shells provide for mounting with four No. 6 oval head machine screws. Material is aluminum.

TYPE "DPD" PLUGS (With Pin Insert)

Mounting flange is 3%" x 111 and shell extends 16" from the mounting surface for-ward and 184" from the mount-



ing surface to the rear. The coaxial contacts extend \$\frac{34"}{100}\$ from the rear of the shell. Shells provide for mounting with four No. 6 ovalhead machine screws. Material is aluminum,

TYPE "DPB" RECEPTACLES (With Socket Insert)



The DPB Receptacles are similar to the Type DP D differing only in the mounting flange which is reduced to 2½" x ½" shell material, zinc or aluminum Standard minum. Standard coaxials with

ceramic insulation. Six insert arrangements available, one having twinax contacts and two having coaxial contacts.

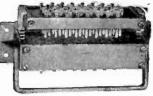
TYPE "DPB" PLUGS (With Pin Insert)



The DPB Plugs are similar to the Type DPD, differing in the same respect as the DPB Recepthe DPB Recep-tacle differs from the DPD. They are mounted with four No. 6 Oval Head Ma-

with four No. 6 Oval Head Ma-chine Screws. Standard finish on all DPB shells is tin-plate and clear lacquer. Other finishes by special order.

"DPR" Rack Type—Complete Unit



Four Insert Arrangements

Rack type fittings are used where large

TYPE DPD-2

Special Instrument Panel Disconnect

The DPD2 has a twogang shell holding 2
standard DPD inserts.
Screw jack extraction
means is available in
straight or angle takeoff. The purpose of the
fitting is the standardization of such
equipment so that it may be interchangeable between assemblies of various aircraft.

"DPB" and "DPD" JUNCTION SHELLS

Type DPB-33

Used with DPB-33S shells, having socket insert assemblies. insert assemblies. Made of diecast aluminum alloy with tin plate and clear lacquer finish.

Type DPB-34 Used with DPB-34P shells, having pin insert as-semblies. Same material and finish as above.



Type DPD-33

Used with DPD-33S shells, hav-ing socket insert assemblies. Made of diecast alumi-num alloy with tin plate and clear lacquer









CANNON ELECTRIC DEVELOPMENT COMPANY • 3209 HUMBOLDT STREET, LOS ANGELES 31, CALIFORNIA

TYPE X FITTINGS

CANNON "TYPE X" PLUGS AND RE-CEPTACLES—The "Type X" Series of small connectors offers inexpensive fittings of reliable quality for sound service, radio, public address systems and geophysical research. In addition to compactness, many exclusive Cannon features are embodied in this series, such as full floating contacts in all socket inserts. Solder pot cable connections are easily occessible. Cable glands are removable. Contacts ore so positive that no latching device is needed for ordinary uses.

The arrow shows spring clip on fullfloating socket contact which gives a positive pressure fit connection.



TYPE "X-11" CORD PLUG (With Socket Insert)

Sturdily built for dependable service. Light in weight. Shell is diecast zinc, nickel finish. Will



take h" to \(\frac{1}{2}\)!"
cable. Used in conjunction with the following: X-14 Wall Receptacle, X-12
Straight Cord Plug, and X-42 Microphone Receptacle X-44L Receptacle.

Contacts Capacity Wt. Lbs. Cat. No. List Pr.
1 15-amp. 0.081 X-1-11 \$1.75
3 15-amp. 0.083 X-3-11 1.75 15-amp. 15-amp. {3-10-amp.} }1-15-amp.} 0.085 X-4-11

TYPE "X-12" CORD PLUG (With Pin Insert)

For use in conjunction with X-11 Straight Cord Plug (Socket Insert) or X-13



Wall Receptacle (Socket Insert). Shell is die-cast zinc, nickel finish. Will take 36" to 33" cable.

Contacts Capacity Wt. Lbs. Cat. No. List Pr.
1 15-amp. 0.061 X-1-12 \$1.25
3 15-amp. 0.063 X-3-12 1.25 4 {3-10-amp.} 0.065 X-4-12 2.25

TYPE "X-13" WALL RECEPTACLE (With Socket Insert)



(With Socket Insert)
Body fits in %" hole
and extends 1%" behind flange. Flange is
1%" in diameter and
drilled for three #440 oval-head screws on
1%" radius 120° apart.
Shell is die-cast zinc,
nickel finish. To be used
in conjunction with the in conjunction with the following X-12.

Contacts Capacity Wt. Lbs. Cat. No. List Pr.
1 15-amp. 0.081 X-1-13 \$1.75
3 15-amp. 0.083 X-3-13 1.75 15-amp. 15-amp. 3-10-amp. 0.085 X-4-13 3.25

TYPE "X-14" WALL RECEPTACLE (With Pin Insert)

Body fits in 34" hole and extends 33" behind the flange, which is 134" in diameter and drilled for three #4-40 ovalhead screws on 15 radius, 120° apart. Shell is zinc, nickel plated finish. Used in conjunction with straight cord



is zinc, meas. Inc. finish. Used in conjunction with straight cord plug (Socket Insert) X-11. Solder pots extend 1/4" beyond rear of body.

Contacts Capacity Wt. Lbs. Cat. No. List Pr. 1 15-amp. 0.040 X-1-14 \$1.25 3 15-amp. 0.042 X-3-14 1.25 (3-10-amp.) 0.044 2.25 X-4-14 1-15-amp.

TYPE "X-42" MICROPHONE RECEPTACLE (With Pin Insert)

Has all the features of "Type X" Straight "Type X" Straight
Cord Plugs and Wall
Receptacles but it is
mounted on a flat base. Shell is die-cast zinc, nickel finish. Use with X-11 straight Cord Plug (Socket Insert) Mounting holes are .144" in diameter and 1" apart.



Contacts Capacity Wt. Lbs. Cat. No. List Pr. 3 15-amp. 0.063 X-3-42 \$1.25



(Type X-3-11 Plug and X-3-42 Receptacle)

TYPE XK FITTINGS

CANNON "TYPE XK" PLUGS AND RECEPTACLES — A quality line of Connectors, similar in design ond construction to the "Type X" Series, but equipped with the fast-octing, sturdy Acme Threaded Coupling Ring and, therefore, ideal for use on equipment which is subjected to considerable vibration and tension on cables, such os on sound trucks and other portable units.

TYPE "XK-11" STRAIGHT CORD PLUG (With Sacket Insert)



Shell is of die-cast zinc, cad. plated fin-ish. Equipped with quick-acting coup-ling ring. Solder pot connections are eas-

ily accessible. Takes ily accessible. Takes ily accessible. Takes able service. Used with XK-12, XK-14. Contacts Capacity Wt. Lbs. Cat. No. List Pr. 1 15-amp. 0.081 XK-1-11 \$3.50 3 15-amp. 0.083 XK-3-11 3.50 4 {3-10-amp.} 0.085 XK-4-11 5.00

TYPE "XK-12" STRAIGHT CORD PLUG (With Pin Insert)

For use in conjunction with Straight Cord Plug (Socket Insert) or Wall Receptacle (Socket Insert) with Coupling Ring. Provided with Shell is made of die-cast zinc, cad. plated finish. Takes %" to ½" cable.



Contacts Capacity Wt. Lbs. Cat. No. List Pr 15-amp. 0.081 XK-1-12 15-amp. 0.083 XK-3-12 \$2.00 2.00 4 {3-10-amp.} 0.085 XK-4-12 3.00

TYPE "XK-13" WALL RECEPTACLE (With Socket Insert)

(For replacement only)

TYPE "XK-14" WALL RECEPTACLE (With pin insert)

Body fits in a ¾" hole and extends ¼" behind a ¾" flange. Flange is 1½" in diameter, drilled for four #4-40 oval-head mounting screws on a ¾" radius, 90° apart. Shell is made of brass, nickel finish. Solder pots extend ¾" beyond body. Has external acme thread on shell and is used in conjunction with straight cord plug XK-11.

Contacts Capacity Wt. Lbs. Cat. No. List Pr.
1 15-amp. 0.045 XK-1-14 \$2.00
3 15-amp. 0.047 XK-3-14 2.00 4 {3-10-amp.} 4 {1-15-amp.} 0.049 XK-4-14

TYPE "XK-13L" WALL RECEPTACLE (With Socket Insert)

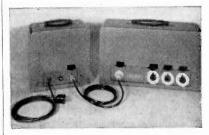


Body fits in 14." hole and extends 14." behind flange. Flange is 14." in diameter and drilled for four #4-40 oval-head mounting screws on a %" radius, 90° apart. Shell is made of brass, nickel finish. Solder pots on contacts extend %" beyond body. jon with a straight cord

Use in conjunction with a straight cord plug (Pin Insert) XK-12.

Contacts Capacity Wt. Lbs. Cat. No. List Pr.

1 15-amp. 0.144 XK-1-13L \$3.75 3 15-amp. 0.146 XK-3-13L 3.85 4 {3-10-amp.} 0.148 XK-4-13L 4.85



Raytheon's 3-channel Remote Amplifier and power unit use two types of Cannon Plugs: "X" and "P". Three receptacles on amplifier at right are Type P3-13.



CANNON ELECTRIC DEVELOPMENT COMPANY . 3209 HUMBOLDT STREET, LOS ANGELES 31, CALIFORNIA

TYPE XL FITTINGS



"XL-3-14N" Receptacle and "XL-3-11" Plug in engaging position. Compare small size of plug with hand.

The Cannon Electric Type "XL" Connector combines various features found in other Cannon types into a small fitting comparable only in size to the Type "X" for low level sound transmission circuits. Among the leading features are the following: (1) convenient latchlock device to hold connector tight. (2) lightweight. (3) polarizing means (4) compression gland with relief spring or integral clamp, if desired. (5) streamlined design, (6) tapped metal for insert retaining screw. (7) provision for special grounding contact and grounding to shell. Contacts are 15-amp. for No. 14 B&S stranded wire in 3 contact insert; 10-amp. in 4 contact insert. Shell is zinc or steel, with various finishes available, bright nickle being standard. Satin-chrome finish available on steel shells. Min. flashover voltage, 1500 (250 working voltage).





XL-3-11 with compression gland removed, showing rubber reducer bushing.

ZINC SHELL TYPES

TYPE "XL-11" STRAIGHT CORD PLUG (Socket Insert)

Type XL-3-11 is equipped with latch device and has



lock device and has raised polarizing boss. No. 1 contact engages before Nos. 2 and 3, and may be used for grounding purposes, if desired. \(\frac{\psi}{2} \) cable accommodation. Overall dimensions: length, 2 \(\frac{\psi}{2} \), with relief spring, 2 \(\frac{\psi}{2} \) approx.

Contacts Capacity Wt. Lbs. Cat. No. List Pr. 15-amp. .0992 10-amp. .0992 XL-3-11 1.25 XL-4-11 1.75

TYPE "XL-12" STRAIGHT CORD PLUG (Pin Insert)



Type XL-12 plug has alignment rib in addition to polarizing groove. Cable accommodation is 402. Insert is removable for soldering or inspection. Overall dimensions:

length, 1%, with cable relief spring, 2%; max. diameter ¾. Insert dia. %".

Contocts Capacity Wt. Lbs. Cat. No. List Pr. 15-amp. .0792 XL-3-12 1.20 10-amp. .0792 XL-4-12 1.60

TYPE "XL-13" RECEPTACLE (Socket Insert)

A wall mounting receptacle similar to XL-14 except that it has socket insert assembly and latch locking device. Overall Dimensions: flange diameter. 1_{10}^{+} ; flange thickness $\frac{3}{2}$; rear of flange to solder pot extension 1 $\frac{1}{16}$; dia. barrel, $\frac{1}{16}$; three mounting holes drilled .136



Contacts Capacity Wt. Lbs. Cat. No. List Pr. 15-amp. .132 10-amp. .132 XL-3-13 1.25 XL-4-13 1.75

TYPE "XL-14" RECEPTACLE (Pin Insert)



This wall mounting receptacle has three mounting holes having .136 diameter. Overall dimensions: flange diameter, 1 $\frac{7}{10}$; width flange. $\frac{1}{32}$; length behind flange to solder pot extension, 1 &; barrel diameter, 34. Material

diameter, zinc, bright nickel finish. Contacts Capacity Wt. Lbs. Cat. No. List Pr. 15-amp. .0592 XL-3-14 1.00 10-amp. .0592 XL-4-14 1.40

TYPE "XL-13-N" RECEPTACLE (Socket Insert)

Similar to XL-14N except has socket insert assembly, with latch-lock device, and polar-izing boss on insert lock device, and polarizing boss on insert barrel. No. 1 contact engages before Nos. 2 and 3 and may be used for grounding circuit, if desired. Overall dimensions: flange and barrel and nut are identical to XL-14N, length from face of flange including solder pot extension, 1 §7.



Contacts Capacity Wt. Lbs. Cat. No. List Pr. 15-amp. .2112 XL-3-13N 1.25 10-amp_a .2112 XL-4-13N 1.75



TYPE XL-3-12 PLUG (engaged with Type XL-3-13N Receptacle)

TYPE "XL-14N" RECEPTACLE (Pin Insert)



Designed to be mounted in a panel and has lock nut, accommodating up to is inch panel. Two fittings may be mounted on a single gang plate.

Overall Dimensions:
flange diameter, 1 in;
barrel diameter, 1;
with 15 max, solder pot extension;

37, with 14 max. S. flange thickness, 12.

Contacts Capacity Wt. Lbs. Cat. No. List Pr. 15-amp. .2048 XL-3-14N 1.15 10-amp. .2048 XL-4-14N 1.55

STEEL SHELL PLUGS INTEGRAL CLAMP TYPES

TYPE XL-3-11SC PLUG (Socket Insert)



The steel shell type is built for rugged service and has cable entry of 14" min., 5/16" max. and has cable entry of ¼" min., 5/16" max. 6/32" shorter overall shell than zinc type. Otherwise same construction, mating with regular XL receptacle.

Bright nickel finish standard.

Contacts Capacity Wt. Lbs. Cat. No. List Pr. 3 15-amp. .1333 XL-3-11SC 2.80 4 10-amp. .1333 XL-4-11SC 3.30

TYPE XL-3-12SC PLUG (Pin Insert)

Corresponds to XL-3-12 except that shell is steel with integral clamp. For 5/16" max. entry. Shell is 7/32" shorter in overall length than corresponding zinc shell.



Contacts Capacity Wt. Lbs. Cat. No. List Pr 3 15-amp. .1250 XL-3-12SC 2.75 4 10-amp. .1250 XL-4-12SC 3.15

TYPE "XL" ADAPTER RECEPTACLES







XL-3-50 1.05 List Pr.

XL-3-50T 1.15 List Pr.

XL-3-50N 1.30

SINGLE GANG WALL RECEPTACLES



Type XL-3-35 (Socket Insert)

Face plate similar to type used in P-35. Takes an XL-3-13N Receptacle. Wt. 0.3479.

Cat. No. XL-3-35 XL-4-35 List Price 3.60 4.00

TWO-GANG ALSO AVAILABLE

Type XL-3-36 (Pin Insert)

Takes an XL-3-14N Receptacle. Bright nickel finish.

Cat. No

List Price 3.65 4.05





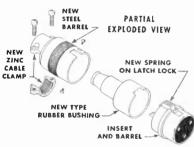
CANNON ELECTRIC DEVELOPMENT COMPANY . 3209 HUMBOLDT STREET, LOS ANGELES 31, CALIFORNIA

FITTINGS

REVISED PRICES

CANNON "TYPE P" FITTINGS. Universally used in sound and allied applications. "Type P" Fittings include a size and type for every requirement, with a high standard of quality. All 90° Pluas have split-shell construction far quick, easy access for wiring ar inspection. Splash-proof but not weather-proof. Plug and receptacle dust caps are available. Laboratary tests show an average valtage-drop of not more than 10 millivolts, with current flowing at the rated capacity. Insulating material is black phenolic which has a 0.7% absorption in 24 hours of immersion in water and a dielectric strength of 550 valts per mil at 60 cycles. Two to 6 contact inserts accommodate No. 10 B&S stranded wire: 8 contact insert No. 14 wire.

New shell designs of the P-CG-11S and P-CG-12S, cord plugs, replace both old type shells of zinc and steel, and such improvements as shorter length, new rubber bushing, improved latch and spring, integral clamp. Shell material is steel, integral clamp zinc.



NEW TYPES WILL MATE WITH CORRESPONDING FITTINGS, SAME AS

TYPE P-CG-11S CORD PLUG COMBINATION STEEL & ZINC



(With Socket Insert)

This new type plug with steel shell and integral zinc clamp is \$\frac{1}{4}\cong \text{shorter than}\$ the old type and has an overall The new rubber bushing

length of 288". The new rubber bushing allows a 48" D. cable entry, and on P4, P5, P6 and P8 ½" D. max. cable entry. Satin chrome finish.

Poles	Capacity	Wt. Lbs.	Cat. No. Li	
2	30-amp.	0.202	P2-CG-11S	
3	30-amp.	0.202	P3-CG-11S	4.75
4	30-amp.	0.202	P4-CG-11S	5.00
5	30-amp.	0.206	P5-CG-11S	5.25
6	30-amp.	0.208	P6-CG-11S	5.40
8	15-amp.	0.208	P8-CG-11S	5.75

TYPE P-CG-12S CORD PLUG COMBINATION STEEL & ZINC

(With Pin Insert)

Similar construction and materials to the -11S. except for pin insert. New rubber bushing on P4 to P8 fittings is con-



tained within the shell and lines the solder pot cavity. Same cable entry sizes

	S. Saun C			
Conta	cts Capaci	tv Wt. L	bs. Cat. No.	List Pr.
2	30-amp.	0.163	P2-CG-12S	\$3.75
3	30-amp.	0.159	P3-CG-12S	3.85
4	30-amp.	0.159	P4-CG-12S	3.95
5	30-amp.	0.163	P5-CG-12S	4.05
6	30-amp.	0.167	P6-CG-12S	4.25
8	15-amp.	0.163	P8-CG-12S	4.50

TYPE "P-23" STRAIGHT CORD PLUG (With Socket Insert), HEAVY DUTY



Shell is die-cast zinc for severe service, but employing all features such as the latch type locking device which is standard

on "Type P." It has integral clamp for %" cable. Also & %" cable if specified. made for Satin chrome finish.

Conta	ts Capacity	Wt. Lbs.	Cat. No.	List Pr.
2	30-amp.	0.166	P2-23	\$4.75
3	30-amp.	0.170	P3-23	4.90
4	30-amp.	0.174	P4-23	5.15
5	30-amp.	0.178	P5-23	5.40
6	30-amp.	0.182	P6-23	5.55
81	15-amp.	0.178	P8-23	5.90

TYPE "P-24" STRAIGHT CORD PLUG (With Pin Insert), HEAVY DUTY

Corresponds with "Type P-23" Plug (Socket insert). Built for hard service. The skirt is of steel, body diecast zinc. Has In-



tegral Clamp, for ¾", ¾" or %" cable, if specified. Satin chrome finish.

3 30-omp. 4 30-amp. 5 30-amp.	0.170 0.173 0.176 0.179	P2-24 P3-24 P4-24 P5-24	\$4.80 4.90 5.00 5.10
5 30-amp. 6 30-amp. 8 15-amp.	0.179 0.182 0.179	P6-24 P8-24	5.30 5.55

TYPE "P-CG-15" 90° CORD PLUG (With Socket Insert)



Has Split Shell and all other "Type P" found in features "Type P-15, 90° Plug" except cable connection, which is an Integral Clamp for ½" or smaller cable. Made of cast

aluminum alloy, finished in tin plate. heavier clamp.

(Conto	icts Capac	ity Wt. Lbs	. Cat. No.	List Pr.
	2	30-amp.	0.220 P	2-CG-15	\$5.20
	3	30-amp.		3-CG-15	5.35
	4	30-amp.		4-CG-15	5.60
	5	30-amp.		5-CG-15	5.85
	6	30-amp.		6-CG-15	6.00
	8	15-amp.	0.232 P	8-CG-15	6.35

TYPE "P-CG-16" 90° CORD PLUG

(With Pin Insert)

Corresponds with Type P-CG-15 90° Plug. (Socket in-Type P-CG-15 90° Plug. (Socket in-sert), having Integ-ral Clamp for ½" or smaller cable. Barrel



is of steel and shell of cast aluminum alloy, tin plate finish. Removable cap for easy access to contacts for wiring or inspection. New heavier clamp.

Cont	acts Capaci	ty Wt.	Lbs. Cat. No.	List Pr.
2 3 4 5 6 8	30-amp. 30-amp. 30-amp. 30-amp. 30-amp. 15-amp.	0.195 0.198 0.201 0.204 0.207 0.204	P2-CG-16 P3-CG-16 P4-CG-16 P5-CG-16 P6-CG-16 P8-CG-16	\$4.80 4.90 5.00 5.10 5.30 5.55

TYPE "P-17" PANEL RECEPTACLE (With Socket Insert), SURFACE MOUNTING



P-17 has Latch Locking Device and all other "Type P" features. Made of die-cast zinc. Satin chrome finish. Flange is 2" in diameter, drilled and countersunk at four points 90° apart on 18 radius for four #4-40 oval head

M.S. Body extends 1" in front of 1/8" mounting flange.

Contacts Capacity Wt. Lbs. Cat. No. List Pr.

2 3 4 5 6 8	30-amp. 30-amp. 30-amp. 30-amp. 30-amp. 15-amp.	0.125 0.129 0.133 0.137 0.141 0.137	P2-17 P3-17 P4-17 P5-17 P6-17 P8-17	\$4.10 4.25 4.50 4.75 4.90 5.25

TYPE "P-18" PANEL RECEPTACLE (with Pin Insert) Surface Mounting

Corresponds to "Type P-17", Panel Recep-tacle. Shell is made of brass, satin chrome finish. Flange is 2" in diameter drilled and countersunk at four points on 18 radius for four #4-40 oval head machine screws.



Contacts Capacity Wt. Lbs. Cat. No. List Pr.

onra	ers Capacity	AA I' FD2.	GG1. 140.	
2	30-amp.	0.156	P2-18	\$2.20
3	30-amp.	0.159	P3-18	2.30
4	30-amp.	0.162	P4-18	2.40
5	30-amp.	0.165	P5-18	2.50
6	30-amp.	0.168	P6-18	2.70
8	15-amp.	0.165	P8-18	2.95

TYPE "P-13" PANEL RECEPTACLE (with Socket Insert) Flush Mounting



Latch Locking Has Device which operates from front of panel. Made of die-cast zinc, satin chrome finish. Flange is 2" in diameter and drilled and countersunk at four points on 1% radius for four #4-40

oval head machine screws.

Contacts Canacity Wt. Lbs. Cat. No. List Pr.

	acts cabacte	, ==-		
2	30-amp.	0.202	P2-13	\$3.85
3	30-amp.	0.206	P3-13	4.00
4	30-amp.	0.210	P4-13	4.25
5	30-amp.	0.214	P5-13	4.50
6	30-amp.	0.218	P6-13	4.65
8	15-amp.	0.214	P8-13	5.00



CANNON ELECTRIC DEVELOPMENT COMPANY • 3209 HUMBOLDT STREET, LOS ANGELES 31, CALIFORNIA

TYPE P FITTINGS

CONTINUED

TYPE "P-14" RECEPTACLE (Pin Insert), FLUSH MOUNTING

Flange is 2" in diameter, drilled with four .120" diameter holes to take four #4-40 ovalhead mounting screws, arranged 90° apart on arranged 90° apart on a radius of 1%". Shell is die-cast zinc, satin chrome finish.



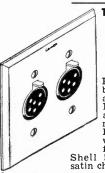
curo	me minsu.		-	
Cont	acts Capacity	Wt. Lbs.	Cat. No.	
2	30-amp.	0.104	P2-14	\$2.00
3	30-amp.	0.107	P3-14	2.10
4	30-amp.	0.110	P4-14	2.20
5	30-amp.	0.113	P5-14	2.30
6	30-amp.	0.116	P6-14	2.50
8	15-amp.	0.113	P8-14	2.75



TYPE "P-35" SINGLE **GANG** WALL RECEPTACLE (With Socket Insert)

Furnished with brackets for standard switch box. Shell is die-cast box. Shell is die-cast zinc, satin chrome finish. Plate is 4½" high and 2¾" wide. Latch Locking Device operates from front of panel.

Up.				
Conf	tacts Capacity	Wt. Lbs.	Cat. No.	List Pr.
2	30-amp.	0.341	P2-35	\$6.70
3	30-amp.	0.345	P3-35	6.85
4	30-amp.	0.349	P4-35	7.10
5	30-amp.	0.353	P5-35	7.35
6	30-amp.	0.357	P6-35	7.50
Š.	15-amp.	0.353	P8-35	7.85
-		_	-	



TYPE "P-35-2G" TWO-GANG WALL RECEPTACLE (With

Socket Inserts)

Furnished with Furnished with brackets for standard switch box. Plate is 4½" high and 4½" wide. Both receptables have Latch Locking Device, operated from front of panel. Shell is die-cast zinc, satin chrome finish.

o, List Pr.
\$9.60
9.90
10.40
10.90
11.20
11,90

MINIMUM FLASHOVER VOLTAGES ON P INSERTS

(socket, #4 to shell) 1050V (socket, #1 to shell) 1100V (socket, #1 and #3 to shell) 1100V

(All others more than 1100 volts.) For complete list, see Type "AP" Bulletin or Third Revised Edition "P & O" Bulletin

TYPE "P-36" SINGLE GANG WALL **RECEPTACLE**

(With Pin Insert)

Plate is 4½" high and 2¾" wide. Furnished with brackets for standard switch box. Made of die-cast zinc, satin chrome finish.

30-amp.

30-amp.

30-amp. 15-amp.

4 5 6



0.286 TYPE "P-36-2G" TWO-GANG WALL RECEPTACLE (With Pin Insert)

0.283

0.286

0.289

P4-36

P5-36 P6-36

P8-36

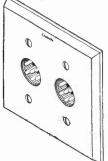


Plate is 41/2" high and 4°_{15} " wide. Drilled to take four #6-32 ovalhead mounting screws. Fur-nished with brackets for standard switch box. Made of die-cast zinc, satin chrome finish.

5.95

0

		-	μ	
Conf	tacts Capaci	ty Wt. I	bs. Cat. No.	List Pr.
2	30-amp.	0.554	P2-36-2G	\$7.60
3	30-amp.	0.563	P3-36-2G	7.80
4	30-amp.	0.572	P4-36-2G	8.00
5	30-amp.	0.579	P5-36-2G	8.20
6	30-amp.	0.588	P6-36-2G	8.60
8	15-amp.	0.579	P8-36-2G	9.10

TYPE "P-41" 90° MICROPHONE OR PANEL RECEPTACLE



(With Socket Insert) Can be mounted in equipment or instrument panel. Equipped with Latch Locking Device. Cap is removable for easy wiring. Shell is die-cast zinc, finished in black wrinkle enamel.

		DIUCIL	*********	
Con	tacts Capacity	y Wt. L	bs. Cat. No.	List Pr.
2	30-amp.	0.249	P2-41	\$6.15
3	30-amp.	0.253	P3-41	6.30
4	30-amp.	0.257	P4-41	6.55
5	30-amp.	0.261	P5-41	6.80
6	30-amp.	0.265	P6-41	6.95
8	15-amp.	0.261	P8-41	7.30

TYPE "P-42" 90° MICROPHONE OR PANEL RECEPTACLE

(With Pin Insert)



Cont	acts Capacit	v Wt. Lbs	. Cat. No.	List Pr.
2	30-amp.	0.176	P2-42	\$4.50
3	30-amp.	0.179	P3-42	4.60
4	30-amp.	0.182	P4-42	4.70
5	30-amp.	0.185	P5-42	4.80
6	30-amp.	0.188	P6-42	5.00
Ř	15-amp.	0.185	P8-42	5.25

ACCESSORY ITEMS DUST CAPS

Fits all "Type P" fit-tings with pin inserts. Made of brass, cadmium plated, with nickel silver bead chain.



Cat. No Lbs. PPC PCI* \$1.50 0.082

*Type PCI is insulated inside for application where contacts are "hot.

TYPE PRC DUST CAP

Fits all "Type P" fit-tings with socket in-serts. Made of brass, cadmium plated with nickel silver bead chain.





ONE-THIRD ACTUAL SIZE

REPLACEMENT ITEMS

A number of Type P and Type O Con-nectors formerly catalogued have been omit-ted from the list. These include various Spe-cial Items. It is the policy of the company at the present time to list such items as obsolete or replacement fittings, which are available only upon special request. If, however, they are required for replacement pur-poses, write for Type P & O Replacement Page for listing and catalog number.

Quantity Discounts Apply

TYPE "PCG" CLAMP GLAND NUT

Made of die-cast zinc, cadmium plated. Complete with gasket. Wt. Lbs 0.037

ONE-THIRD ACTUAL SIZE

Cat. No. PCG \$.75

TYPE "P" GLAND GASKET As used in Straight Glands and Clamp Glands. Made of soft white rubber.

ONE-THIRD

Cat. No.

List Price \$.10

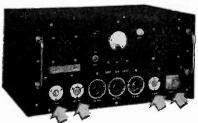
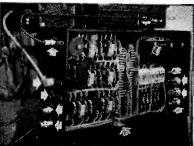


PHOTO SOUTHWESTERN INDUSTRIAL ELECTRONIC CO.
Geophysical Radio with X3-13 Receptacles and One AN3102 (at extreme right)



Type "P" CONNECTORS on Mitchell Camera Bockground Projector



CANNON ELECTRIC DEVELOPMENT COMPANY • 3209 HUMBOLDT STREET, LOS ANGELES 31, CALIFORNIA

TYPE O FITTINGS

CANNON "TYPE O" PLUGS AND RE-CEPTACLES. This series consists of a line of 3-contact oval-shaped plugs and receptacles, equiped with Latch Locking Device. Contacts are silver-plated, full-floating, non-twisting, carry 30-amp. capacity. Solder terminals are tinned for ease of wiring. 30-amp. contacts accommodate No. 10 B&S stranded wire.



TYPE "03-42" MICROPHONE OR PANEL RECEPTACLE (With Pin Insert)

Has flat base, with two lugs for mounting with #4-40 oval-head screws. Made of die-cast zinc, and cadmium plated.



Contact Capacity Wt. Lbs. Cat. No. List Pr. 3 30-amp. 0.271 03-42 \$4.50 30-amp.

TYPE "03-41" 90° MICROPHONE OR PANEL RECEPTACLE (Socket Insert)



Flat base is flanged and is attached to microphone or panel by means of two #4-40 oval-head mounting screws. Made of die-cast zinc, cad. plated.

Contacts Capacity Wt. Lbs. Cat. Na. List Pr. 3 30-amp. 0.274 03-41 \$4.50

TYPE "03-11" STRAIGHT CORD PLUG (With Socket Insert)



Contacts Capacity Wt. Lbs. Cat. No. List Pr. 3 30-amp. 0.113 03-11 \$4.50

TYPE "03-12" STRAIGHT CORD PLUG (With Pin Insert)

Corresponds with No. 03-11 "Type O" Straight Cord Plug (Socket Insert). Has integral cable clamp, for Made of die-cast zinc, cadmium plated.



Contacts Capacity Wt. Lbs. Cat. No. List Pr. 3 30-amp. 0.104 03-12 \$4.50

TYPE "03-13" FLUSH WALL RECEPTACLE (With Socket Insert)



Flange is 2" in diameter, Flange is 2" in diameter, drilled with four holes to take #4-40 oval-head mounting screws, 90° apart on a radius of \(\frac{1}{2}\)." Made of die-cast zinc, cadmium plated. Latch Locking Device is operated from panel front.

Contacts Capacity Wt. Lbs. Cat. No. List Pr. 3 30-amp, 0.148 03-13 \$4.50

TYPE "03-14" FLUSH WALL RECEPTACLE

(With Pin Insert)

The flange is 2" in diameter, drilled with four holes to take #4-40 oval-head mounting screws, 90° apart, on a radius of 18". Made of die-cast zinc, cadmium plated.



Contacts Capacity Wt. Lbs. Cat. No. List Pr. 3 30-amp, 0,107 03-14 \$4.50

TYPE "0" REPLACEMENT FITTINGS

(Discounts on replacement fittings apply to these items.)





ONE-FOURTH ACTUAL SIZE

03-35

03-36

TYPE "O" CONNECTORS ARE USED ON STANDARD RADIO BROADCAST MICROPHONES





TYPE TO FITTINGS

CANNON TYPE "TQ" COAXIAL FIT-TINGS. Type "TQ" Coaxial Fittings provide continuous shielding with constant impedence. Each fitting contains 1 standard Cannon style silverplated contact, rated at 10-amp. and accommodating #16 stranded or #14 solid, or smaller B&S stranded wire. Solder pots are tinned for ease in wiring. Insulation is ceramic.

CANNON TYPE "TQ" COAXIAL CORD PLUG (With Socket Insert) For Continuous Shielding



A tapered skirt is provided on this Plug, to which the shielding is easily soldered. Accommodates but can be supplied specified with order. Body is brass, silver plated.

ver plated. Contacts Capacity Wt. Lbs. Cat. No. List Pr. 1 10-amp. 0.106 TQ-1-12 \$2.00

TYPE "TQ13BC" FLUSH RECEPTACLE (With Pin Insert)

For Mounting **Behind Panel**

Same construction as No. TQ-1-13C, except that the flange is mounted on back of panel. Body is brass, zinc plated.



ONE-HALF ACTUAL SIZE Contact Capacity Wt. Lbs. Cat. No. List F 1 10-amp. 0.039 TQ-1-13BC \$2.0

TYPE "TQ-13B" RECEPTACLE For Continuous Shielding

Designed for mounting Designed for mounting behind panel. Accommodates ½" cable, Body is brass, zinc plated.

Contacts Capacity Wt. Lbs, Cat. No. List Pr. 1 10-amp. 0.057 TQ-1-13B \$2.00



TYPE "TQ-13" RECEPTACLE (With Pin Insert) For Continuous Shielding

For Continuous Shielding
Provided with a tapered skirt to which the shielding is easily soldered. Also has a removable solder pot shield, which snaps into place. Ceramic insulation is used in all ACTUAL SIZE
Type "TQ" Connectors, silver plated. Accommodates %" cable, but can be supplied for %" cable if specified with order. Two holes—120 in diameter, # apart.
Contacts Capacity Wt. Lbs. Cat. Na. List Pr. 1 10-amp. .043 TQ-1-13 \$2.00



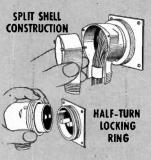
TYPE "TQ-13C" RECEPTACLE (With Pin Insert)

Similar to TQ-1-13, except Similar to TQ-1-13, except that it is not provided with solder pot shield and is not designed for continuous shielding Uses Ceramic insulation. For mounting on front of panel. Body actual size is brass, silver plated. Two holes—.120 in diameter, 18 apart for mounting.





CANNON TYPES K & RK PLUGS FOR AIRCRAFT





The Type "K" Series was designed especially for use in the aircraft field and is used aimost universally for aircraft radio, instrument and electrical circuits. Airhough light in weight, units are rugged and durable. The "K" Series is made in 3 basic types: (1) Straight Type. (2) 90° Type. (3) Wall Mounting Unit, for which either straight or right angle junction shells are provided. Inserts of laminated and molded phenolic are removable.

The cable entry is regularly threaded for various sizes of aircraft flexible conduit, but there are fittings also available with cable clamp for special applications. The "K" Series is comprised of 8 diameters, with a great variety of contact arrangements covering a range of from 1 to 82 contacts, depending, of course, upon the diameter. 188 insert arrangements.

A key and groove arrangement makes it possible to connect fittings easily and quickly without the necessity of fumbling to match pins and sockets. This eliminates any

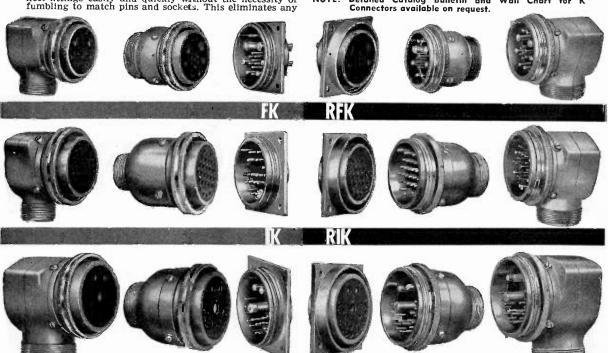
possibility of forcing together in improper alignment and thus bending or breaking pins. Large contacts may be removed for soldering, thereby eliminating the possibility of damaging the insert with excessive heat.

Quick, easy access to solder pots at back of contact is made possible simply by removing either 3 or 4 Shakeproof Sems, depending upon the size of the fitting. Since these screws are equidistant, the barrel and insert may be rotated to accommodate 3 or 4 different positions. This is also true of the flanges on wall mounting units, making it easy to rotate these fittings to facilitate cable installation and avoid sharp bends in conduit.

Plugs and receptacles are locked together by means of a quick-acting threaded nut which holds both members firmly together and prevents shaking or accidentally pulling them apart. 10 to 250-amp. contacts.

NOTE: Detailed Catalog Bulletin and Wall Chart for K

NOTE: Detailed Catalog Bulletin and Wall Chart for K Connectors available on request.





MORE THAN 200 INSERT ARRANGEMENTS AVAILABLE

CANNON "Type AN" Series of plugs and receptacles was designed especially to meet Army-Navy Specifications for aircraft electrical connectors. While the AN Series retains all the basic features of the Type K Series—features which have established conclusive proof of their effectiveness as applied to aircraft—numerous changes in design and construction have been made to conform to latest Army-Navy Specifications.

Type AN Plugs are made in three basic shapes or styles. These are: 1. Straight cord connectors. 2. Right angle or 90° cord connectors. 3. Flanged connectors for wall mounting. An almost unlimited combination of circuits and current capacities can be handled with AN connectors and their interchangeable inserts.

changeable inserts.
Removable and interchangeable inserts make it possible to change any fitting from a pin to a socket, or vice versa, and also to change the number of circuits



AN3108 Plug



AN3106 Plug



handled through any fitting provided the inserts are of the same diameter. The split shell, a feature ploneered by Cannon, makes it easy to install wiring or to solder contacts.

An important feature of the Type AN Series is the means provided for coupling the members together. This consists of a coupling nut which serves to draw the parts together and to release them, while it also prevents plugs and receptacles from being jarred apart by excessive vibration. No special tools are required to lock or unlock plugs and receptacles, to separate split shells or to remove inserts. This feature is invaluable, since it eliminates delay in servicing in the field and also because there are so many combinations possible with Type AN Series. Series.

Also "AN" Wall Charts. *Write for Complete Bulletin.

PEAK VOLTAGES

CONTACT CAPACITIES 5 to 200-amp. AN3102 70 to 14,000V.

CINCH-JONES SALES * CONNECTING DEVICES

"300" SERIES PLUGS AND SOCKETS General Specifications

2 Contacts to 33 Contacts. All plugs and sockets are polarized. 2 Contact Plugs and Sockets are round, others rectangular.

Plugs of one size cannot fit into sockets of another size.

Phosphor bronze "knife-switch" type socket contacts engage both

sides of flat plug contacts—double contact area.

Molded Bakelite insulation.

Formed metal caps. Formed fibre linings in caps.

Small size, with good separation between contacts.

Plug or socket for panel mounting.

Plug or socket with cap.

Simple, fool-proof assembly.

Finish on caps-Black Crystal.

Plug prongs— $\frac{3}{32}$ " wide by $\frac{3}{64}$ " thick.

We suggest using the 300 series in circuits not exceeding 45 Volts and 5 Amps., although circuit characteristics may permit higher ratings.

Plug	with Angle Brack	kets	Socke	t with An	gle Bfacket	3
P304 AB	No. Contacts P-302-AB (2) P-303-AB (3) P-304-AB (4) P-306-AB (6) P-306-AB (6) P-310-AB (10) P-312-AB (12)	.39 .45 .52	D E S 3 O 4 A B	No. C S-302-AB S-303-AB S-304-AB S-306-AB S-310-AB S-312-AB	(2) 3 (3) (4) (6) (8) (10) (12)	Ea25 .30 .34 .42 .52 .62 .72
Plu	ng with Flush Plan	te	Sock	et with	Flush Plate	_

Plug	j with 1	Flush Plate		Socke	t with	Flush Plate	
P304FP		Contacts (2) \$ (3) (4) (6) (6) (7) (8) (10) (10)	Ecr. .40 .44 .48 .54 .61 .67	SJOAFP	No. S-302-F S-303-F S-304-F S-306-F S-308-F S-310-F S-312-F	Contacts P (2) \$ P (3) P (4) P (6) P (8) P (10)	Eq41 .45 .50 .57 .67 .77 .87

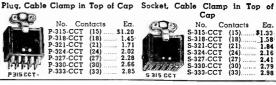
	No. C	ontacts	Ea.		No. C	ontacts	Ea
-	P-302-RP		.46		S-302-RP	(2)	. 5 .4
TINE.	P-303-RP	(3)	.51		S-303-RP	(3)	5
	P-304-RP	(4)	.55	33	S-304-RP	(4)	5
4	P-306-RP	(6)	.63		S-306-RP	(6)	6
A.C.A.	P-308-RP	(8)	.73	20 7	S-308-RP	(8)	81
P304 RP	P-310-RP	(10)	.83	\$304RP	S-310-RP	(10)	9:
	P-312-RP	(12)	.92		S-312-RP	(12)	1.0

riug,	No. Co	ole in Cap	Ēα.	Docas	No. Co	iole in Corr	Ea.
P 304 FUT	P-302-FHT P-303-FHT P-304-FHT P-306-FHT P-308-FHT P-310-FHT P-312-FHT		.39 .43 .47 .54 .61 .69	5304 FHT	S-302-FHT S-303-FHT S-304-FHT S-306-FHT S-308-FHT S-310-FHT S-312-FHT	(2) \$ (3) (4) (6) (8) (10) (12)	.40 .44 .48 .57 .68 .79

	Flared Hole and with La		,		Flared Ho nd with Ke		
	No. Cont	acts	Eq.		No. Cont	acts	E
4	P-302-FHT-L	(2)\$		_	S-302-FHT-K	(2)	\$.
al.	P-303-FHT-L	(3)	.57	(a)	S-303-FHT-K	(3)	
14 808	P-304-FHT-L	(4)	.62	31	S-304-FHT-K	(4)	
1	P-306-FHT-L	(6)	.68		S-306-FHT-K	(6)	
anthon	P-308-FHT-L	(8)	.75	Water?	S-308-FHT-K	(8)	
P304FHT-L	P-310-FHT-L	(10)	.84	S304FHT-K	S-310-FHT-K	(10)	.!
	P-312-FHT-L	(12)	.92		S-312-FHT-K	(12)	1.

Plug,	Cable Cla	mp in Corp	,	Socket,	Cable	Clamp in	Сегр
PBOACCT	No. Co P-302-CCT P-303-CCT P-304-CCT P-308-CCT P-310-CCT P-312-CCT	(2) \$ (3)	.53 .57 .62 .68 .75 .84	S304CCT	No. S-302-C0 S-303-C0 S-304-C0 S-306-C0 S-310-C0 S-312-C0	CT (3) CT (4) CT (6) CT (8) CT (10)	Ea \$.5- 6- 7: 8: 9-

ALES * coi	ELECTRICAL NNECTING DEVICES
Plug, Cable Clamp in Cap and with Latches No. Contacts P-302-CCT-L (2) \$.67 P-303-CCT-L (3) .71 P-304-CCT-L (6) .83 P-304-CCT-L (6) .89 P-310-CCT-L (10) .98 P-312-CCT-L (12) .1.07	Socket, Cable Clamp in Cap and with Keepers No. Contacts S-302-CCT-K (2) \$.68 S-303-CCT-K (3) .73 S-304-CCT-K (4) .77 S-306-CCT-K (6) .86 S-308-CCT-K (8) .97 S-310-CCT-K (10) 1.08 S-304-CCT-K (12) 1.19
Plug with Angle Brackets No. Contacts Ea. P-315-AB (15) S 5.76 P-318-AB (18) .95 P-321-AB (21) 1.20 P-324-AB (24) 1.45 P-375-AB (27) 1.71 P-375-AB (27) 1.71 P-333-AB (30) 1.96 P-333-AB (33) 2.21	Socket with Angle Brackets No. Contacts Ed. S-315-AB (15) S .89 S-318-AB (18) 1.07 S-321-AB (21) 1.33 S-324-AB (24) 1.58 S-327-AB (27) 1.84 S-330-AB (30) 2.09 S-333-AB (33) 2.34
Plug with End Brackets No. Contacts Ea. P-315-EB (15) \$.76 P-318-EB (18) .95 P-324-EB (21) 1.20 P-324-EB (24) 1.45 P-327-EB (27) 1.71 P-315-EB P-330-EB (30) 1.96 P-333-EB (33) 2.21	Sockets with End Brackets No. Contacts Ed.
Plug with Shallow Brackets No. Contacts Ea. P.315-SB [15] \$ 11.14 P.318-SB [18] 1.40 P.321-SB [21] 1.65 P.324-SB [24] 1.96 P.327-SB [27] 2.21 P315 SB P.330-SB [30] 2.78	Sockets with Shallow Brackets No. Contacts Ea \$ -0.0 \
Plug with Deep Bracket No. Contacts P-311-DB (15) P-318-DB (18) P-3218-DB (21) P-324-DB (24) P-324-DB (24) P-324-DB (27) P-335-DB (37) P-330-DB (30) P-330-DB (30) P-333-DB (33) P-333-DB (33) P-380-P	Socket with Deep Bracket No. Contacts Earl Solis.DB (15) S1.28 S.318.DB (18) S.321.DB (21) 1.78 S.324.DB (21) 1.78 S.324.DB (27) 2.34 S.3150B S.330.DB (30) 2.66 S.333.DB (33) 2.92
Plug with Flared Hole in Top of Cap No. Contacts P.315.FHT (15) S1.01 P.318.FHT (18) 1.27 P.321.FHT (21) 1.52 P.324.FHT (24) 1.84 P.327.FHT (27) 2.09 P.330.FHT (30) 2.41 P.331.FHT (33) 2.66	No. Contacts Eq. S-315-FHT (15) \$1.14 \$5.318-FHT (18) 1.40 \$5.321-FHT (24) 1.97 \$5.327-FHT (24) 1.97 \$5.327-FHT (24) 2.22 \$5.305-FHT (30) 2.54 \$5.335-FHT (33) 2.79
Plug, Flared Hole in Top of Cap and with Latches No. Contacts Ea. P.315.FHT.L (15). S.1.14 P.315.FHT.L (21). 1.65 P.321.FHT.L (21). 1.65 P.321.FHT.L (27). 2.27 P.300.FHT.L (27). 2.54 P.305.FHT.L (30). 2.54 P.305.FHT.L (33) 2.79	Socket, Flared Hole in Top of Cap and with Keepers No. Contacts Ea. S.315-FHT-K (15) . S1.22 S.315-FHT-K (16) . 1.53 S.321-FHT-K (27) . 2.10 S.321-FHT-K (27) . 2.35 S.335-FHT-K (30) . 2.67 S.333-FHT-K (33) . 2.33
Plug, Cable Clamp in Top of Cap	Socket, Cable Clamp in Top of



Plug, Cable Clamp in Top of Cap and with Latches	Socket, Cable Clamp in Top of Cap and with Keepers
No. Contacts Ed. P-315-CCT-L (15). \$1.30 P-318-CCT-L (17). \$1.58 P-321-CCT-L (21). \$1.58 P-321-CCT-L (21). \$1.58 P-324-CCT-L (24). \$2.16 P-327-CCT-L (27). \$2.16 P-330-CCT-L (30). \$2.79 P-330-CCT-L (No. Contacts Er. S-31s.CCT-X (15). S1,46 S-318-CCT-X (16). S1,46 S-318-CCT-X (18). 1,72 S-324-CCT-X (24). 2,29 S-324-CCT-X (24). 2,29 S-325-CCT-X (30). 2,53 S-330-CCT-X (30). 3,11

CINCH-JONES SALES * CONNECTING DEVICES

P-404-FHT

400" SERIES PLUGS AND SOCKETS (Formerly "Heavy Duty")

General Specifications

2, 4, 6, 8, 10 and 12 Contacts.

All plugs and sockets are polarized.

Phosphor bronze "knife switch" type socket contacts engage both sides of flat plug contacts—double contact area.

Molded Bakelite insulation.

Fibre linings in caps.

Plug or socket for panel mounting.

Plug or socket with caps.

Finish on caps—Black Crystal.
Plug prong cross section $\frac{1}{4}$ " x $\frac{1}{16}$ ".
Locking fittings available for panel types or extension cables as shown.

We recommend using the 400 series in circuits not exceeding 110 Volts and 10 Amperes, although circuit characteristics may permit higher ratings.

PLUG-Less An	Brackets not
Drilled or To	

	Specine	30	
	No. C	ontacts	Εσ
	P-402-LAB	(2)	s '.3
11 11	P-404-LAB	(4)	.4
	P-406-LAB	(6)	.5
4	P-408-LAB	(8)	.6
3305	P-410-LAB	(10)	.8
P-404-LAB	P-412-LAB	(12)	.9

SOCKET-Less Angle Brackets. Not Drilled or Tapped Unless Specified

TEE	No.	Contac	ts	Ea.
Party.	S-402-LA		\$.39
	S-404-LA	B (4)		.57
CATAL STATE	S-406-LA	B (6)		.76
00	S-408-LA	B (8)		.95
S-404-LAB	S-410-I-A			1.14
301-27-0	S-412-LA	B (12)		1.33

PLUG—with Angle Brackets for 1/16" Panel



P404 SB

SOCKET-with Angle Brackets

	No C	ontacts	Ea.
E 150 E	S-402-AB	(2) 5	.64
	S-404-AB	(4)	.83
	S-406-AB		
1 - H - V	S-408-AB	(8)	1.20
9.0	S-410-AB		1.40
404-AB	S-412-AB	(12)	1.5

PLUG-with Shallow Brackets

P-402-SB	(2)	•
P-404-SB	(4)	
P-406-SB	(6)	
P-408-SB	(8)	
P-410-SB	(10)	
P-412-SB		

	SOCKET-with	hαllow	Brackets	
No.	Contacts			Eσ.
S-402-SB	(2)			s .76
S-404-SB	(4)			1.01
S-405-SB	(6)			1 27
S-408-SB	(8)			1.52
S-410-SB	(10)			1.77
S-412-SB	(12)			2.02

PLUG-with Deep Bracket

	No. Contacts	Ea.
37	P-402-DB (2)	\$.69
	P-404-DB (4)	89
ľ	P-406-DB (6) P-408-DB (8)	1.08
	P-410-DB (10)	1.46
8	P-412-DB (12)	1.65

SOCKET-with Deep Brackets

PLUGS

	PLUG-Flared Hole in Top	PLUG—Flared Hole in End
	No. Contacts Ea. P-402-FHT (2) \$.64	No. Contacts Ea.
	P-402-FHT (2) S .64	P-402-FHE (2) \$.64
	P-404-FHT (4)	P-404-FHE (4)
130000	P-406-FHT (6) 1.01	P-406-FHE (6) 1.01
	P-408-FHT (8) 1.20	P-408-FHE (8) 1.20
	P-410-FHT (10) 1.39	P-410-FHE (10) 1.39
	P-412-FHT (12) 1.57	P-412-FHE (12) 1.57

SOCKETS

SOCKET-Flared Hole in	SOCKET - Flared Hole in
Top	End
No. Contacts Ea.	No. Contacts Ea.
S-402-FHT (2) \$.70	S-402-FHE (2) \$.70
S-404-FHT (4)	S-404-FHE (4)
S-406-FHT (6)	S-406-FHE (6) 1.21
S 408-FHT (8) 1,46	S-408-FHE (8)
S-410-FHT (10) 1.72	S-410-FHE (10) 1.72
S-412-FHT (12) 1.97	S-412-FHE (12) 1.97

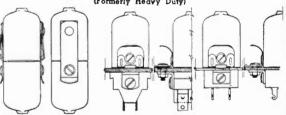
PLUGS

PLUG-Cable Clamp in	PLUG-Cable Clamp in
Top	End
No. Contacts Ea.	No. Contacts Ea.
P-402-CCT (2) \$,89	P-402-CCE (2) \$.89
P-404-CCT (4) 1.08	P-404-CCE (4) 1.08
P-406-CCT (6) 1.27	P-406-CCE (6) 1.27
P-408-CCT (8) 1.45	P-408-CCE (8) 1.45
P-410-CCT (10) 1.64	P-410-CCE (10) 1.64
P-412-CCT (12)	P-412-CCE (12) 1.83

SOCKETS

SOCKET-Cable Clamp in	SOCKET—Cable Clamp in
Top	End
No. Contacts Ea.	No. Contacts Ea.
S-402-CCT (2) S.96	S-402-CCE (2) \$.96
S-404-CCT (4) 1.21	S-404-CCE (4)
S-406-CCT (6) 1.46	S-406-CCE (6)
S-408-CCT (8) 1.72	S-408-CCE (8) 1.72
S-410-CCT (10) 1.97	S-410-CCE (10)
S-412-CCT (12) 2.22	S-412-CCE (12) 2.22

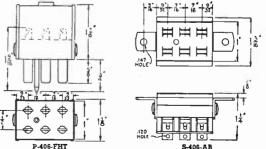
LOCKS FOR 400 SERIES PLUGS AND SOCKETS (Formerly Heavy Duty)



ILLUSTRATING No. 63 LOCK. May be used on all panel mount 400 Series plugs and sockets when surface is flush with top of panel. Cannot be used on type DB plugs.

No. 63 Locks ONLY, per pair.

Dimensions of 400 Series Plugs and Sockets



CINCH-JONES SALES * CONNECTING DEVICES

"500" SERIES PLUGS AND SOCKETS

For Complete Listing of 500 SERIES, Write for No. 500 Catalog

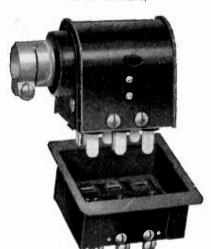
Designed for 5,000 volts and 25 amperes per contact. Circuit characteristics, however, may alter this rating one way or the other.

Long leakage path from terminal to terminal, and terminal to ground. Contacts are brass and phosphor bronze, silver plated. Metal parts of caps and brackets are steel, parkerized (rust-proofed). Plug and socket blocks are interchangeable in caps and brackets.

All sizes are polarized in a manner to prevent a smaller plug being inserted in a larger socket. Thus different sizes may be used on one installation without danger of making wrong connections.

Extreme care has been taken to make terminal connections under cap very accessible both for original wiring and subsequent inspection. The cap is insulated with canvas bakelite. Plug prong cross section $\frac{5}{16}$ " x $\frac{3}{32}$ ". IMPORTANT: For safety with high voltages DEEP BRACKETS should always be used on one plug or socket, when the other plug or socket has a CAP. SHALLOW BRACKETS are for use only in connecting two units, each unit having plug or socket with SHALLOW BRACKET.

P-506-CE (Plug with Cap) (BX Clamp shown but not furnished)



S-506-DB (Socket with Deep Bracket)



S-506-CE (Socket with Cap)



P-506-DB (Plug with Deep Bracket)

Cable entrance: Because of the great variation in type and size of cables, we have considered it best not to supply cable clamps of any kind. The cap end is made to accommodate standard BX clamps which may be obtained at any electrical jobbing house. The cap end will be furnished with round hole from ½" diameter and ½" diameter in steps of ½", if the size required is given on order. If no size is given, plain cap end with center punch locating center will be shipped.



P-506-SB (Plug with Shallow Bracket)



S-506-SB (Socket with Shallow Bracket)

LOCKS FOR 500 SERIES PLUGS AND SOCKETS



Locks shown above are used in connection with any DEEP BRACKET and cap combination.

The locks securely hold the units together, but they can be released instantly

The mounting plates are made to fit all DEEP BRACKETS, and are fastened by the same screws or rivets that hold the deep brackets to the panel. Can not be used on shallow brackets. Sold in pairs only.

No. 500-L Locks Per pair \$0.99

PLUG

PLUG

PLUG

With	1 Сар	With De	ep Bracket	With Sh	allow Br	zcket
Code	Price Ea.	Code	Price Ea.	Code	Pric	e Ea.
P-502-CE	\$2.75	P-502-DB	\$2.42	P-502-SB		\$2.42
P-504-CE	3.96	P-504-DB	3.47	P-504-SB		3.47
P-506-CE	5.17	P-506-DB	4.51	P-506-SB		4.51
P-508-CE	6.38	P-508-DB	5.56	P-508-SB		5.56
P-510-CE	7.59	P-510-DB	6.60	P-510-SB	***************************************	6.60
P-512-CE	8.80	P-512-DB	7.65	P-512-SB		7.65

SOCKET

SOCKET

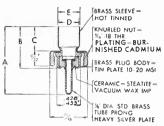
SOCKET

With Co	ıp	With De	eep Bracket	With Sh	allow Brad	ket
Code F	Price Ea.	Code	Price Ea.	Code	Price	Eα.
S-502-CE	\$2.75	S-502-DB	\$2.42	S-502-SB	\$	2.42
S-504-CE	3.96	S-504-DB	3.47	S-504-SB		3.47
S-506-CE	5.17	S-506-DB	4.51	S-506-SB		4.51
S-508-CE	6.38	S-508-DB	5.56	S-508-SB		5.56
S-510-CE	7.59	S-510-DB	6.60	S-510-SB		6.60
S-512-CE	8.80	S-512-DB	7.65	S-512-SB		7.65

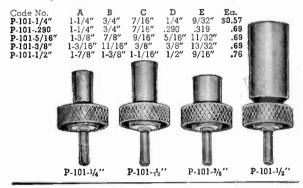
CINCH-JONES SALES ELECTRICAL CONNECTING DEVICES

SERIES 101 PLUGS

The entire No. 101 Series of Plugs are identical with the exception of the cable ferrule which is furnished in four sizes as listed below. All metal parts are of brass. These Plugs fit all of the No. 101 Series Sockets. Assembly meets Navy Specifications. A low



loss Plug and Socket ideal for high frequency connections.



SERIES 101 SOCKETS

The No. 101 Series Sockets are furnished in three types as shown below. Base is of Brass, Nickel Plated with Chrome Flash. Brass contact is Silver Plated. Insulation of low loss natural color XXX Bakelite, Meets Navy Specifications. The S-101-D is similar to the S-101 except that the Bakelite is recessed in the base. S-101-D Mod, is the same as S-101-D except that two sides of the base are milled as shown. Mounting Holes No. 101 —No. 41 drill on $\frac{11}{16}$ " centers. Mounting holes No. 101-D and 101-D Mod. No. 30 drill on $\frac{13}{16}$ " centers.



Price Each-\$0.76 Price Each-\$0.76 Price Each-\$0.51

SERIES 201

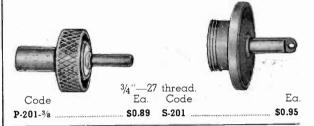
PLUGS

The No. 201 Series Plugs are of the same design as the No. 101 but are of heavier stock and larger. Made in one size only with 3/8" ferrule. All metal parts are of Brass, same finish as No. 101 Series and Wax Impregnated Ceramic insulation. Overall length l_{16}^{9} ". Prong diameter $\frac{5}{32}$. Fits only the 201 Socket.

SOCKETS

The 201 Socket is similar to the S-101-D except larger. Brass base is nickel plated with Chrome Flash. Brass contact is Silver Insulation is of Plated low loss natural color XXX Bakelite. Both Plug and Socket meet Navy Specifications.

Mounting holes - No. 30 drill on l" centers.



SERIES 202

PLUGS

SOCKETS

The 202 Series Plugs and Sockets are made in two contacts only. Metal parts are of Brass with burnished Cadmium Plate. Insulation is of Molded Bakelite. Phosphor Branze "Knife Switch" type Socket Contacts engage both sides of flat Plug Contacts-double contact area. Formed Fibre linings in caps. Polarized. Knurled nut has 3/4"-27 thread.

Socket Mounting Holes. No. 30 drill on 1" centers.



P-202-CCT-\$0.70 (as shown above) S-202-CCT-\$0.72

P-202-FHT-\$0.57 (without Cable Clamps)

S-202-FHT-\$0.58

S-202-B-\$0.83

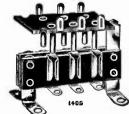
P-202-B-\$0.81

1400 SERIES PLUGS AND SOCKETS

This series of "disconnect" plugs and sockets has the distinct advantage of low cost for a separate unit handling many circuits. Due to exposed metal parts, it is recommended for use when the complete unit is within a housing.

Reduces costs of servicing units. Advantageous in shipping when it is desirable to pack units separately. Polarized—assures correct coupling. Spring temper brass sockets assure perfect contact. Standard units are listed below from 5 to 16 contacts. However we can supply units having as many as 30 or more

On No. 1420 or larger we recommend the plug be divided into two or more units, as a single long plug is not mechanically strong. The socket will be made in one assembly.



No. 1405 (5 Contacts) No. 1406 (6 Contacts) No. 1407 (7 Contacts) No. 1408 (8 Contacts) No. 1409 (9 Contacts) No. 1410 (10 Contacts)	Ea. \$0.35 No. 1411 Ea41 No. 1412 Ea46 No. 1413 Ea52 No. 1414 Ea57 No. 1415 Ea63 No. 1416	(11 Contacts) (12 Contacts) (13 Contacts) (14 Contacts) (15 Contacts) (16 Contacts)	Ea. \$.68 Ea74 Ea79 Ea85 Ea90 Ea96
---	--	--	-------------------------------------

For units with more than 16 contacts, add 6c to the No. 1416 price for each additional contact.

BARRIER TYPE TERMINAL STRIPS

Increased insulation is provided by having Barriers placed between each Terminal. These Barriers follow around the edge of the Strips and terminate at the base. They not only make a long leakage path but prevent direct shorts from frayed wires at the terminals. Mounting holes are at the ends as illustrated. The base is molded Bakelite.

The Terminals and Binder Screws are of brass, nickel plated. Marker Strips may be ordered and imprinted to supply terminal designations. These Marker Strips mount beneath Terminal Strips and also afford insulation from metal mounting surface.

No. 2-140-Y

No. 140-Y

5-40 x 1 Binder Head Screws

No. 140 TERMINAL STRIPS

Metal to Metal Spacing over Bakelite 14"





No. 140-3/4 W

Eα.

.57

.69

.83

...\$.19 .32

Code

1-140-¾ W.. 2-140-¾ W..

4-140-34 W

5-140-34 W

6-140-34 W.

No. 2-140-3/4 W

The standard Marker Strips are of gray fiber \$\frac{1}{2}\tilde{1}'' thick and character designations are imprinted in white. Bakelite Marker Strips can be supplied at an increase in price, and are designated by code MSX instead of MS. Prices on applications. application.

MARKER STRIPS

for 140, 140-W and 140-34 W

The standard Marker

Code	Per 100	Code	Ea.
MS-1-140	\$ 2.48	1-140-Y	\$.19
MS-2-140	3.30	2-140-Y	.32
MS-3-140	4.13	3-140-Y	
MS-4-140	4.95	4-140-Y	.57
MS-5-140		5-140-Y	.69
MS-6-140	6.60	6-140-Y	.83
MS-7-140	7.43	7-140-Y	.95
MS-8-140	8.25	8-140-Y	1.08
MS-9-140	9.08	9-140-Y	1.21
MS-10-140	9.90	10-140-Y	1.33
MS-11-140	10.73	11-140-Y	1.45
MS-12-140	11.55	12-140-Y	1.58
MS-13-140	12.38	13-140-Y	1.71
MS-14-140	13.20	14-140-Y	1.84
MS-15-140	14.03	15-140-Y	1.96
MS-16-140	14.85	16-140-Y	2.09
MS-17-140	15.68	17-140-Y	2.21
MS-18-140	16.50	18-140-Y	2.34
MS-19-140	17.33	19-140-Y	2,46
340 00 140	10.11	00 140 10	

18.15

18.98

20-140-Y

21-140-Y



The standard Marker Strips are of gray fibre g_2^{rr} thick and character designations are imprinted in white. Bakelite Marker Strips can be stripfied as a strip of the stripfied as a stripfied as a

be supplied at an increase in price, and are designated by code MSX instead of MS. Prices on application.

Code	Per 100
MS-1-140-Y	.\$ 5.78
MS-2-140-Y	
MS-3-140-Y	
MS-4-140-Y	
MS-5-140-Y	
MS-6-140-Y	. 9.90
MS-7-140-Y	10,73
MS-8-140-Y	. 11.55
MS-9-140-Y	12.38
MS-10-140-Y	. 13.20
MS-11-140-Y	14.03
MS-12-140-Y	. 14.85
MS-13-140-Y	15.68
MS-14-140-Y	16.50
MS-15-140-Y	17.33
MS-16-140-Y	18.15
MS-17-140-Y	18.98
MS-18-140-Y	
MS-19-140-Y	
MS-20-140-Y	
MS-21-140-Y	. 22.28

No. 2-140

No. 140 Code

1-140	.15
2-140	.24
3-140	.33
4-140	.42
5-140	.51
6-140	.59
7-140	.68
8-140	.77
9-140	.86
10-140	.95
11-140	1.03
12-140	1.12
13-140	1.21
14-140	1.31
15-140	1.40
16-140	1.49
17-140	1.57
18-140	1.66
19-140	1.75

No. 2-140-W No. 140 W

0000	Lu,	
1-140-W		
2-140-W		
3-140-W	.44	
4-140-W	.57	
5-140-W	.69	
6-140-W	.83	
7-140-W	.95	
8-140-W	1.08	
9-140-W	1.21	
10-140-W	1.33	
11-140-W	1.45	
12-140-W	1.58	
13-140-W	1.71	
14-140-W	1.84	
15-140-W:	1.96	
16-140-W	2.09	
17-140-W		
18-140-W	2.34	
10 140 117		

Code

2-14U-W	.32
3-140-W	.44
4-140-W	.57
5-140-W	.69
6-140-W	.83
7-140-W	.95
8-140-W	1.08
9-140-W	1.21
10-140-W	1.33
11-140-W	1.45
12-140-W	1.58
13-140-W	1.71
14-140-W	1.84
15-140-W:	1.96
16-140-W	2.09
17-140-W	2.21
18-140-W	2.34
19-140-W	
00.140.347	2 60

7-140-% W. .95 8-140-3/4 W. 1.08 9-140-3/4 W

No. 141 TERMINAL STRIPS

Metal to Metal Spacing over Bakelite 3/2"



No. 141

Eq.

.31

.54

.75

.88

.99

1.10

1.22

1.33

1.56

1.67

1.78

1.90

2.01

2.12

\$.20

Code

1.141

2-141

3-141

4-141 5-141. 6-141

7-141

8-141

9-141

10-141

11-141

12-141

13-141

14-141

15-141

16-141

17-141

18-141

19-141

20-141



21-140...... 1.93 21-140-W 2.72

6-32 x 1/4 Binder Head Screws

	No. 141-W	
	Code	Eα.
	1-141-W\$.24
	2-141-W	.41
	3-141-W	.57
	4-141-W	
	5-141-W	.90
	6-141-W	1.07
ı	7-141-W	1.23
ı	8-141·W	1.40
ı	9-141-W	
ı	10-141-W	1.73
ı	11-141-W	1.89
	12-141-W	

2.22

2.72

2.88

3.05

3.21

3.38

13-141-W. 14-141-W.

15-141-W

16-141-W.

17-141-W

18-141-W

20-141-W



No. 2-141-3/4-W No. 141-34 W

Code		Ea.
1-141-3/4	W	\$.24
2-141-3/4	w	.41
3-141-3/4	W	.57
4-141-3/4	W	.74
5-141-3/4	W	.90
6-141-3/4	w	1.07
7-141-3/4	W	1.23
8-141-3/4	W	1.40
9-141-3/4	w	1.56
10-141-34	w	1.73
11-141-34	w	1.89
12-141-3/4	w	2.06
13-141-3/4	w	2.22
14-141-3/4	w	2.39
15-141-34	w.	2.55
16-141-34	w	2.72
17-141-3/4	w	
		2.88
1R.141.3/4	w	2 05

19 141 34 W

20-141-34 W

MARKER STRIPS for 141, 141-W and 141-¾ W

MS-20-140... MS-21-140...

Standard Marker Strips are of gray fibre $\frac{1}{2}$? thick. See column above for designation for Bake-lite Marker Strips.

Code

\$.24	MS-1-141	\$ 2.75
41	MS-2-141	3.85
,57	MS-3-141	4.95
74	MS-4-141	6.05
	MS-5-141	
1.07	MS-6-141	8.25
1.23	MS-7-141	9.35
1.40	MS-8-141	10.45
1.56	MS-9-141	11,55
1.73	MS-10-141	12,65
1.89	MS-11-141	13.75
2.06	MS-12-141	14.85
2.22	MS-13-141	15.95
2.39	MS-14-141	17.05
2.55	MS-15-141	18.15
2.72	MS-16-141	19.25
2.88	MS-17-141	20.35
3.05	MS-18-141	21.45
3.21	MS-19-141	
3.38	MS-20-141	23.65



No. 2-141-Y

No. 141-Y			
Code		Ea.	
1-141-Y	\$.24	
2-141-Y		.41	
3-141-Y		.57	
4-141-Y		.74	
5-141-Y		.90	
6-141-Y		1.07	
7-141-Y		1.23	
8-141-Y		1.40_	
9-141-Y		1.56	
10-141-Y		1.73	
11-141-Y		1.89	
12-141-Y		2.06	
13-141-Y		2.22	
14-141-Y		2.39	
15-141-Y		2.55	
16-141-Y		2.72	
17-141-Y	*** ****	2.88	

18-141-Y

19-141-Y

MARKER STRIPS for 141-Y

Standard Marker Strips are of gray fibre 1,7" thick. See column above for designation for Bake-lite Marker Strips.

Code	Per 100
MS-1-141-Y	\$ 6.05
MS-2-141-Y	7.15
MS-3-141-Y	8.25
MS-4-141-Y	
MS-5-141-Y	10.45
MS-6-141-Y	11.55
MS-7-141-Y	12,65
MS-8-141-Y	
MS-9-141-Y	14.85
MS-10-141-Y	15.95
MS-11-141-Y	17.05
MS-12-141-Y	18.15
MS-13-141-Y	19.25
MS-14-141-Y	20.35
MS-15-141-Y	21.45
MS-16-141-Y	22.55
MS-17-141-Y	23.65
MS-18-141-Y	24.75
MS-19-141-Y	25.85
MS-20-141-Y	

CINCH-JONES SALES * CONNECTING DEVICES

BARRIER TYPE TERMINAL STRIPS

8-32 x 18" Binder Head Screws No. 142 TERMINAL STRIPS Metal to Metal Spacing over Bakelite 18"









No. 142		No. 142-34 W		No. 142-Y Code Ea.	MARKER STRIPS for 142-Y Code Per 100
Code Ea.	Code Ea.	Code Ea.	Code Per 100	Code Ea.	
1-142 \$,23	1-142-W \$.30	1-142-34 W \$.30	MS-1-142 \$ 3.03	1-142-Y \$.30	MS-1-142-Y \$ 6.33
2-142	2-142-W	2-142-34 W50	MS-2-142 4.40	2-142-Y	MS-2-142-Y 7.70
3-142	3-142-W	3-142-3/4 W70	MS-3-142 5.78	3-142-Y	MS-3-142-Y 9:08
4-142	4-142-W	4-142-3/4 W90	MS-4-142 7.15	4-142-Y	MS-4-142-Y 10.45
5-142	5-142-W 1.11	5-142-3/4 W 1.11	MS-5-142 8.53	5-142-Y 1.11	MS-5-142-Y 11.83
6-142	6-142-W 1.31	6-142-3/4 W 1.31	MS-6-142 9.90	6-142-Y 1.31	MS-6-142-Y 13.20
7-142 1.07	7-142-W 1.52	7-142-3/4 W 1.52	MS-7-142 11.28	7-142-Y 1.52	MS-7-142-Y 14.58
8-142 1.20	8-142-W 1.72	8-142-3/4 W 1.72	MS-8-142 12.65	8-142-Y 1.72	MS-8-142-Y 15.95
9-142 1.34	9-142-W 1.93	9-142-34 W 1.93	MS-9-142 14.03	9-142-Y 1.93	MS-9-142-Y 17.33
10-142 1.49	10-142-W 2.12	10-142-3/4 W 2.12	MS-10-142 15.40	10-142-Y 2.12	MS-10-142-Y 18.70
11-142 1.62	11-142-W 2.33	11-142-3/4 W 2.33	MS-11-142 16.78	11-142-Y 2.33	MS-11-142-Y 20.08
12-142 1.76	12-142-W 2.53	12-142-3/4 W 2.53	MS-12-142 18.15	12-142-Y 2.53	MS-12-142-Y 21.45
13-142 1.90	13-142-W 2.74	13-142-34 W 2.74	MS-13-142 19.53	13-142-Y 2.74	MS-13-142-Y 22.83
14-142 2.04	14-142-W 2.94	14-142-3/4 W 2.94	MS-14-142 20.90	14-142-Y 2.94	MS-14-142-Y 24.20
15-142 2.18	15-142-W 3.15	15-142-34 W 3.15	MS-15-142 22.28	15-142-Y 3.15	MS-15-142-Y 25.58
16-142 2.32	16-142-W 3.34	16-142-3/4 W 3.34	MS-16-142 23.65	16-142-Y 3.34	MS-16-142-Y 26.95
17-142 2.45	17-142-W 3.54	17-142-34 W 3.54	MS-17-142 25.03	17-142-Y 3.54	MS-17-142-Y 28.33

No. 150 TERMINAL STRIPS

118" wide by \$5" high. Terminals are mounted on \$18" brass, burnished nickel plate. Fits standard 50 Amp. solder lug for 6 Ga. stranded wire. Metal to metal spacing over bakelite \$%".



No. 150 Code	Ea.	No. 150-V	ν Ea.	No. 150-3/4	W Eα.	MARKER S For 150 Se Code	
2-150	.55	1-150-W\$ 2-150-W	1.13	1-150-34 W 2-150-34 W	1.13	MS-1-150 MS-2-150	8.14
4-150	1.32 1.71 2.09	3-150-W 4-150-W 5-150-W	1.60 2.07 2.53	3-150-34 W 4-150-34 W 5-150-34 W	1.60 2.07 2.53	MS-3-150 MS-4-150 MS-5-150	9.68 11.22 12.76
7-150	2.48 2.86 3.25	6-150-W 7-150-W 8-150-W	3.00 3.46 3.92	6-150-34 W 7-150-34 W 8-150-34 W	3.00 3.46 3.92	MS-6-150 MS-7-150 MS-8-150	14.30 15.84 17.38
9-150	3.63 4.02	9-150-W 10-150-W	4.40 4.87	9-150-% W 10-150-% W	4.40	MS-9-150	18.92 20.46

No. 151 TERMINAL STRIPS

2" wide by 11" high. Terminais are mounted on % centers. Screws: 12-32 x %" brass, burnished nickel plate. Fits standard 70 Amp. solder lug for 4 Ga. stranded wire. Metal to metal spacing over bakelite 34".



No. 151	No. 151-W	No. 151-34 W	MARKER STRIPS for 151 Series
Code Ea.	Code Ea.	Code Ea.	Code Per 100
1-151 \$.94	1-151-W\$1.10	1-151-34 W \$1.10	MS-1-151\$ 6.68
2-151 1.71	2-151-W 2.04	2-151-34 W 2.04	MS-2-151 10.18
3-151 2.48		3-151-34 W 2.97	MS-3-151 13.48
4-151 3.25	4-151-W 3.91	4-151-34 W 3.91	MS-4-151 16.78
5-151 4.02	5-151-W 4.84	5-151-34 W 4.84	MS-5-151 20.08
6-151 4.79	6-151-W'5.78	6-151-34 W 5.78	MS-6-151 23.38
7-151 5.56	7-151-W 6.71	7-151-34 W 6.71	MS-7-151 26.68
8-151 6.33	8-151-W 7.65	8-151-34 W 7.65	MS-8-151 29.98

No. 152 TERMINAL STRIPS

STRIP:

2½" wide by
1½" high. Terminals are mounted on 1½" centers. Screws:
½"-28 x ½" brass, burnished nickel plate. Fits standard 90 Amp. solder lug for 2 Ga. stronded wire. Metal to metal spacing over bakelite 1".



No. 152		No. 152-V	V	No. 1523/		MARKER for 152		
Code	Ēα.	Code	Ea.	Code	Ea.	Code	Per 100	
1-152	\$1.27	1-152-W	\$1.49	1-152-34 W	\$1.49	MS-1-152:	\$ 7.15	
2.152	2.42	2-152-W	2.86	2-152-3/4 W	2.86	MS-2-152	12.65	
3-152	3.58	3-152-W	4.24	3-152-3/4 W	4.24	MS-3-152.	18.15	
4-152	4.73	4-152-W	5.61	4-152-34 W	5.61	MS-4-152.	23.65	
5-152	5.89	5-152·W	6,99	5-152-34 W	6.99	MS-5-152.	29.15	
6-152	7.04	6-152-W	8.36	6-152-3/4 W	8.36	MS-6-152.	34.65	

"W" Solder Terminal for Barrier Strips



	For use with	Per
Code	Barrier Strip	100
No. W-140	No. 140	\$3.80
No. W-141	No. 141	5.06
No. W-142	No. 142	6.33

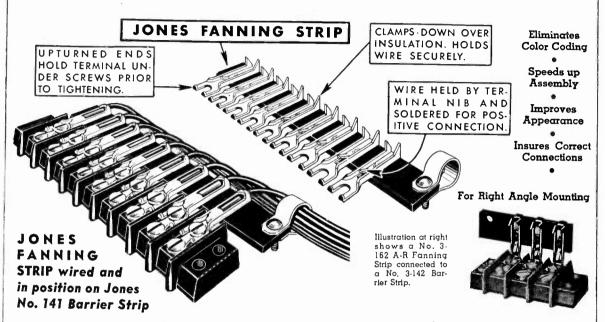
	Code	For use Barrier		Per 100
ļ	No. W-150	No. 1	.50	\$8.86
ĺ	No. W-151	No. I	51	15.18
l	No. W-152	No 1	152	22.77



ry"
lder
mina

	c	ode		e with r Strip	Per 100
	No.	Y-140	No.	140	\$3.80
•	No.	Y-141	No.	141	5.06
	No.	Y-142	No.	142	6.33

FANNING STRIPS FOR CONNECTING TO BARRIER TERMINAL STRIPS



Jones Fanning Strip Terminals are of .032" Brass, Cadmium Plated. The Bakelite strips are furnished with a hole in either the right or left end for fastening the cable with a cable clamp or lacing twine. Simplifies cable or harness wiring, assuring positive connections. Makes replacement of units an easy matter and assures correct connections after servicing.

In many instances where there is not sufficient room for the standard Fanning Strips we can supply those listed formed for right angle mounting permitting use when Barrier mounts flush with the side of the chassis. Specify Series 160A, 161A and 162A instead of 160, 161 and 162. Prices slightly higher.



6-161-L (Cable Clamp on Leit)



6-161-R (Cable Clamp on Right)

THE 160 SERIES

The following Fanning Strips fit the 140 Series Barrier Strips. Terminals are mounted on $\frac{\pi}{N}$ Bakelite, $\frac{1}{N}$ wide and on $\frac{\pi}{N}$ centers.

on 98 Centers.		on 14" centers.
Code Ea.	Code Ea.	Code Ea.
2-160-L \$.12	2-160-R\$.12	2-161-L\$.13
3-160-L18	3-160-R18	3-161-L
4-160-L23	4-160-R23	4-161-L24
5-160-L29	5-160-R29	5-161-L30
6-160-L35	6-160-R35	
7-160-L41	7-160-R41	6-161L
8-160-L46	8-160-R46	7-161-L 42
9-160-L52	9-160-R	8-161-L
10-160-L58	10-160-R58	9-161-L53
11-160-L64	11-160-R64	10-161-L59
12-160-L69	12-160-R69	11-161-L65
13-160-L	13-160-R	12-161-L
14-160-L81	14-160-R81	13-161-L
15-160-L87	15-160-R87	14-161-L83
16-160-L92	16-160-R92	15-161-L88
17-160-L98	17-160-R98	16-161-L
18-160-L 1.05	18-160-R 1,05	17-161-L
19-160-L 1.10	19-160-R 1.10	18-161-L 1.06
20-160-L 1.16	20-160-R 1.16	19-161-L 1.11
21-160-L 1.21	21-160-R 1.21	20-161-L 1.17
	and the same of th	

THE 161 SERIES

The following Fanning Strips fit the 141 Series Barrier Strips. Terminals are mounted on 34" Bakelite, 5%" wide and on 14" centers.

Code E a.	Code Ea.	Ŀ
2-161-L\$.13	2-161-R\$.13	ı
3-161-L	3-161-R19	ı
4-161-L24	4-161-R24	l
5-161-L	5-161-R30	1
6-161L36	6-161-R36	l
7-161-L	7-161-R42	l
8-161-L	8-161-R47	
9-161-L53	9-161-R53	ı
10-161-L59	10-161-R59	l
11-161-L65	11-161-R65	
12-161-L	12-161-R70	
13-161-L76	13-161-R76	ı
14-161-L83	14-161-R83	ı
15-161-L88	15-161-R88	ı
16-161-L	16-161-R94	
17-161-L	17-161-R99	
18-161-L 1.06	18-161-R 1.06	
19-161-L 1.11	19-161-R 1.11	

THE 162 SERIES

The following Fanning Strips fit the 142 Series Barrier Strips. Terminals are mounted on 31" Bakelite, 3/8" wide and on 18" centers.

	Code Ea. 2-162-L \$.15 3-162-L21 4-162-L26 5-162-L32	Code Ea. 2-162-R \$.15 3-162-R21 4-162-R26 5-162-R32	below. Cable Clamp is of Brass Nickle Plated, with 6-32 round head Nickle Plated Brass Screws. For conven- ience the Cable Clamps are furnished unassembled.
	6-162-L39	6-162-R39	CABLE CLAMP SIZES AVAILABLE
I	7-162-L	7-162-R44	No. I. D.
I	8-162 L50	8-162-R50	CC-161-4 1/4"
l	9-162-L	9-162-R55	CC-161-8
l	10-162-L	10-162-R62	CC-161-10 5%"
l	11-162-L	11-162-R67	CC-161-12 3/4"
ı	12-162-L	12-162-R73	CC-161-14
	13-162-L	13-162-R	List price 11c each.
	14-162-L85	14-162-R85	Be sure to give code number
	15-162-L90	15-162-R90	when ordering.
	16-162-L96	16-162-R96	On small sizes Lacing Twine can be used for anchoring
	17-162-L 1.01	17-162-R 1.01	cable to the Fanning Strip in- stead of Cable Clamp.



CABLE CLAMPS

Cable Clamps are available for the Fanning Strips listed at the left and are furnished in 6 different sizes as listed below. Cable Clamp is of Brass Nickle Plated, with 6-32 round head Nickle Plated Brass Screws. For convenience the Cable Clamps are furnished unassembled.

CABLE CLAMP SIZES AVAILABLE

No.	I. D.
CC-161-4	14"
CC-161-6	
CC-161-8	
CC-161-10	5%"
CC-161-12	3/4"
CC-161-14	7/2"

List price 11c each.

20-161-R..... 1.17

ELECTRICAL CINCH-JONES SALES * CONNECTING DEVICES



NO. 1 TERMINAL STRIPS

Terminal 1/3" Round Copper, Flattened at Ends, Tin Plated A convenient and compact strip where solder connections are desired.

Insulation: Canvas Base Bakelite, 1/2" wide, 3/4" thick.
Terminals mounted on 1/2" centers. Mounting holes 1/2" from center of end terminals.

end term: Code	inals.	Ea.	Code		Ea.
No. 2-1	(2 Terminals)	\$.12	No. 6-1	(6 Terminals)	\$.17
No. 3-1	(3 Terminals)	.13	No. 7-1	(7 Terminals)	.18
No. 4-1	(4 Terminals)	.14	No. 8-1	(8 Terminals)	.19
No. 5-1	(5 Terminals)	.15	No. 9-1	(9 Terminals)	.20



NO. 12 TERMINAL STRIPS

Terminal 1/16" Brass, Tin Plated

Similar to No. 11, except larger. Solder tab is flat, but will be bent up, if specified. Screw: 10-32 x 36" brass, binder head, burnished nickel plate. Insulation: XP Bakelite, 1" wide, A" wied on New Section 10 to 1

thick. Terr	ninals mounted o	n //g cen	iters. Mounti	ng noies /8 Holl	Cellier
of end terr	ninals. Will take	up to N	o. 9 B & S g	guge wire (.114")	, <u> </u>
Code		Ea.	Code		Ea.
No. 2-12	(2 Terminals)	S .44	No. 6-12	(6 Terminals)	\$1.14
No. 3-12	(3 Terminals)	.61	No. 7-12	(7 Terminals)	1.32
					1.50
No. 4-12	(4 Terminals)	.79	No. 8-12	(8 Terminals)	
No. 5-12	(5 Terminals)	.97	No. 9-12	(9 Terminals)	1.67



NO. 3 TERMINAL STRIPS
Terminal 1/4" Round Copper, Flattened at Each End, Tin
Plated

Similar to No. 1, except closer spacing and furnished with holes instead of hooks.
Insulation: Canvas base Bakelite, ½" wide, ½" thick.
Terminals mounted on ¾" centers. Mounting holes ¾" from center of end terminals.

Code		Ea.	Code		Ea.
No. 2-3	(2 Terminals)	\$.14	No. 6-3	(6 Terminals)	\$.19
No. 3-3	(3 Terminals)	.15	No. 7-3	(7 Terminals)	.20
No. 4-3	(4 Terminals)	.17	No. 8-3	(8 Terminals)	.21
No. 5-3	(5 Terminals)	.18	No. 9-3	(9 Terminals)	.22



NO. 16 TERMINAL STRIPS

Terminal .028" Brass, Cadmium Plated
A popular priced screw and solder terminal with many desirable features.
Screw: 6-32 x ½" brass, binder head, burnished nickel plate. Insulation: XP Bakelite, ¾" wide, ½" thick. Terminals spaced on ½" centers. Mounting holes ½" end terminals.

Code Ea. No. 2-16 (2 Terminals) \$.13 No. 3-16 (3 Terminals) .18 No. 4-16 (4 Terminals) .22 No. 5-16 (5 Terminals) .26	Code No. 6-16 (6 Terminals) No. 7-16 (7 Terminals) No. 8-16 (8 Terminals) No. 9-16 (9 Terminals)	\$.31 .35 .40 .44
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NO. 6 TERMINAL STRIPS

Terminal .046" Brass, Cadmium Plated

Screw and solder terminal. Substantial and reasonably

priced.
Screw: 6-32 x ¼" brass, binder head, burnished nickel plate. Insulation: XP Bakelite, ¾" wide, ¾" thick.
Terminals spaced on ½" centers. Mounting holes ½" from center of end terminals.

Code		Ea.	Code		Ea.
No. 2-6	(2 Terminals)	\$.15	No. 6-6	(6 Terminals)	\$.33
No. 3-6	(3 Terminals)	.20	No. 7-6	(7 Terminals)	.37
No. 4-6	(4 Terminals)	.24	No. 8-6	(8 Terminals)	.42
No. 5-6	(5 Terminals)	.29	No. 9-6	(9 Terminals)	.46



NO. 20 TERMINAL STRIPS
Terminal 1/16" Brass, Burnished Nickel Plate

Strong two screw terminal with ears to hold wire securely under screw.

Screws: 6-32 x ½" brass, binder head, burnished nickel plate. Insulation: XP Bakelite, 7%" wide, 1."

thick. Terminals mounted on 5%" centers. Mounting holes ¾" from center of end terminals. Will take up to No. 13 B & S gauge wire (.071").

center of end termindis.	MIII (CIKE	up to No. 13 b	a 3 gauge whe	(.071 /-
Code	Ea.	Code		Ea.
No. 2-20 (2 Terminals)	\$.31	No. 6-20	(6 Terminals	\$.92
No. 3-20 (3 Terminals)	.46	No. 7-20	(7 Terminals)	1.08
No. 4-20 (4 Terminals)		No. 8-20	(8 Terminals)	1.23
No. 5-20 (5 Terminals)		No. 9-20	(9 Terminals)	1.39



NO. 7 TERMINAL STRIPS

Terminal .046" Brass, Burnished Nickel Plate
A two screw insulated terminal strip that can be
mounted directly on metal surface.
Screws: 6-32 x \(\frac{1}{2} \) " brass, binder head, burnished
nickel plate. Insulation: XP Backelte, 76" wide, \(\frac{1}{2} \)" wide, \(\frac{1}{2} \)" centers. Mounting holes \(\frac{1}{2} \)" from
center of end terminals

Code	end terminals.	Ea.	Code		Ea.
No. 2-7	(2 Terminals)	\$.22	No. 6-7	(6 Terminals)	\$.62
No. 3-7	(3 Terminals)	.32	No. 7-7	(7 Terminals)	.72
No. 4-7	(4 Terminals)	.42	No. 8-7	(8 Terminals)	.81
No. 5-7	(5 Terminals)	.52	No. 9-7	(9 Terminals)	.91



NO. 21 TERMINAL STRIPS

Terminal 1/16" Brass, Burnished Nickel Plate

ierminal 1/10 Brass, Burnished Nickel Plate
Similar to No. 20, except larger,
Screw: 8.32 x 4" brass, binder head, burnished
nickel plate. Insulation: XP Bakelite, 11½" wide,
½" thick. Terminals mounted on 34" centers.
B & S gauge wire (.090").

Code		Ea.	Code		Ea.
No. 2-21	(2 Terminals)	\$.44	No. 6-21	(6 Terminals)	\$1.14
No. 3-21	(3 Terminals)	.62	No. 7-21	(7 Terminals)	1.32
No. 4-21	(4 Terminals)	.79	No. 8-21	(8 Terminals)	1.50
No. 5-21	(5 Terminals)	.97	No. 9-21	(9 Terminals)	1.67



NO. 10 TERMINAL STRIPS

Terminal 1/16" Brass, Tin Plated

sturdy screw and solder terminal with both screw and solder connections on top of bakelite panel. Solder terminal turned up.

Screw: 6-32 x 4" brass, binder head, burnished nickel plate. Insulation: XP Bakelite, \%" wide, \%" thick. Terminals spaced on \%" centers. Mounting holes \%" from center of end terminals. Will take up to No. 15 B & S gauge wire (.057").

12 B & 2	gauge wire (.05	/~).			
Code		Ea.	Code		Ea.
No. 2-10	(2 Terminals)	S .23	No. 6-10	(6 Terminals)	\$.67
No. 3-10	(3 Terminals)	.34	No. 7-10	(7 Terminals)	.78
No. 4-10	(4 Terminals)	.45	No. 8-10	(8 Terminals)	.89
No. 5-10	(5 Terminals)	.56	No. 9-10	(9 Terminals)	1.00



NO. 22 TERMINAL STRIPS

Terminal 1/16" Brass, Burnished Nickel Plate

Similar to No. 21, except larger.
Similar to No. 21, except larger.
Screws: 10.32 * ½" brass, binder head, burnished nickel plate. Insulation: XP Bakelite, 11¼" wide, A" thick. Terminals mounted on ½" centers.
Mounting holes ½" from center of end terminals.
Will take up to No. 8 B & S gauge wire (128").

Code		Ea.	Code		Ea.
No. 2-22	(2 Terminals)	\$.58	No. 6-22	(6 Terminals)	\$1.46
No. 3-22	(3 Terminals)	.80	No. 7-22	(7 Terminals)	1.68
No. 4-22	(4 Terminals)	1.02	No. 8-22	(8 Terminals)	1.90
No. 5-22	(5 Terminals)	1.24	No. 9-22	(9 Terminals)	2.02



NO. 11 TERMINAL STRIPS

Terminal 1/16" Brass, Tin Plated

Similar to No. 10, except larger in size and the solder tab is flat, but will be bent up, if specified, nickel plate. Insulation: XP Bakelte, 76" wide, 16" thick. Terminals mounted on 34" centers, Mounting holes 4% if nor center of end terminals. Will take up to No. 12 B 6 S gauge wire (.080").

Code		Ea.	Code		Ea.
No. 2-11	(2 Terminals)	\$.31	No. 6-11	(6 Terminals)	\$.79
No. 3-11	(3 Terminals)	.43	No. 7-11	(7 Terminals)	.91
No. 4-11	(4 Terminals)	.55	No. 8-11	(8 Terminals)	1.03
No. 5-11	(5 Terminals)	.67	No. 9-11	(9 Terminals)	1.16



No. 32 TERMINAL STRIPS Terminal .050" Brass, Tin Plated

An ideal terminal strip (solder type) for medium heavy wiring. One or more wires may be connected to this terminal.

Insulation: XX Bakelite, %" wide, 1/4" thick. Terminals mounted on $\frac{3}{1}$ " centers. Mounting holes $\frac{3}{1}$ " from center of end terminals.

Code Ec No. 2-32 (2 Terminals) \$.2 No. 3-32 (3 Terminals) .4 No. 4-32 (4 Terminals) .4 No. 5-32 (5 Terminals) .5	No. 6-32 (6 Terminals) No. 7-32 (7 Terminals) No. 8-32 (8 Terminals)	\$.62 .72 .81 .91
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CINCH-JONES SALES ELECTRICAL CONNECTING DEVICES

NO. 34 TERMINAL STRIPS

NO. 34 TERMINAL STRIPS
Terminal .082" Brass, Cadmium Plated
Very substantial and neat appearing terminal. Ample length solder terminal below panel, with screw connection above.
Screw: 8-32 x , ** brass, binder head, burnished nickel plate. Insulation: XP Bakelite, *%* wide, *%* thick. d on *½* centers. Mounting holes *½* from center of

Terminals spaced end termingle

Code		Ea.	Code		Ea.
No. 2-34 (2	Terminals)	\$.22	No. 6-34	(6 Termingls)	\$.44
	Terminals)	.28	No. 7-34	(7 Terminals)	.50
	Terminals)	.33	No. 8-34	(8 Terminals)	.55
No. 5-34 (5	Terminals)	.39	No. 9.34	(9 Terminals)	.61



NO. 53 TERMINAL STRIPS
Terminal, Spring Temper Brass, Cadmium Plated

A reliable socket type contact for many uses. Takes A" prongs. May be used with No. 98 terminal strips (same terminal spacing).
Insulation: XP Bakelite, ½" wide, ¾" thick. Terminals mounted on ¾" centers. Mounting holes ¾" from center of end terminals.

Code		Ea.	Code		Ea.
No. 2-53	(2 Terminals)	\$.19	No. 6-53	(6 Terminals)	\$.32
No. 3-53	(3 Terminals)	.22	No. 7-53	(7 Terminals)	.35
No. 4-53	(4 Terminals)	.25	No. 8-53	(8 Terminals)	.39
No. 5-53	(5 Terminals)	.29	No. 9-53	(9 Terminals)	.42



NO. 36A TERMINAL STRIPS

Terminal .031" Brass, Cadmium Plated

A popular priced screw and solder terminal with both screw and solder tab on same side of bakelite panel. Screw: 6-32 x ¼" brass, binder head, burnished nickel plate. Insulation: XP Bakelite, ¾" wide, ¼" thick. Terminals spaced on ½" centers. Mounting holes ½" from center of end terminals.

No. 3-36A	(2 Terminals) (3 Terminals) (4 Terminals)	.18	No. 7-36 A	(6 Terminals) (7 Terminals)	.35
	(4 Terminals) (5 Terminals)	.22 .26		(8 Terminals) (9 Terminals)	.40 .44



NO. 59 TERMINAL STRIPS

Terminal .028" Brass, Tin Plated

An inexpensive solder terminal. One wire may be brought up through hole and soldered, leaving vertical tab for other connection.

Insulation: XP Bakelite, 3½" wide, ½" thick. Terminals mounted on ½" centers. Mounting holes ½" from center of end terminals.

Code		Ea.	Code		Ea.
No. 3-59 No. 4-59	(2 Terminals) (3 Terminals) (4 Terminals) (5 Terminals)	\$.08 .11 .14 .18	No. 6-59 No. 7-59 No. 8-59 No. 9-59	(6 Terminals) (7 Terminals) (8 Terminals) (9 Terminals)	



NO. 42 TERMINAL STRIPS

Terminal, Hard Brass, Cadmium Plated

Similar in construction to No. 53. Takes V_8 " prong. May be used with No. 99 terminal strips (same terminal

Insulation: XP Bakelite, $V_2{}^{\prime\prime}$ wide, $J_2{}^{\prime\prime}$ thick. Terminals mounted on $V_2{}^{\prime\prime}$ centers. Mounting holes $V_2{}^{\prime\prime}$ from center of end terminals.

Code		Ea.	Code		Ea.
No. 2-42	(2 Terminals	\$.22	No. 6-42 (Terminals)	\$.40
No. 3-42	(3 Terminals)	.26	No. 7-42 (Terminals)	.44
No. 4-42	(4 Terminals)	.31	No. 8-42 (3 Terminals)	.48
No. 5-42	(5 Terminals)	.35	No. 9-42 (Terminals)	-53



NO. 60 TERMINAL STRIPS

Terminal .050" Brass, Cadmium Plated

Screw: 6-32 x A" brass, binder head, burnished nickel plate. Insulation: XP Bakelite, 1/6" wide. 1/6" thick. Terminals spaced on A" centers. Mounting holes A" from center of end terminals.

Code Eσ Code No. 2-60 (2 Terminals) \$.18 No. 6-60 No. 7-60 (6 Terminals) S .41 (7 Terminals) .46 (3 Terminals) (4 Terminals) No. 3-60 .24 No. 4-60 No. 5-60 .30 No. 8-60 (8 Terminals)

.35



NO. 43 TERMINAL STRIPS

Terminal, Hard Brass, Cadmium Plated

Same as No. 42, except that it takes $\frac{1}{2}$ " prongs. May be used with No. 100 terminal strips. Insulation: XP Baxelite, $\frac{1}{2}$ " wide, $\frac{1}{2}$ " thick. Terminals mounted on $\frac{1}{2}$ " centers. Mounting holes $\frac{1}{2}$ " from center of end terminals.

Code		Ea. 1	Code		Ea.
No. 2-43	(2 Terminals)	\$.28	No. 6-43	(6 Terminals)	\$.50
No. 3.43	(3 Terminals)	.33	No. 7-43	(7 Terminals)	.55
No. 4-43	(4 Terminals)	.39	No. 8-43	(8 Terminals)	.61
No. 5-43	(5 Termingls)	.44	No. 9-43	(9 Terminals)	.66



(5 Terminals)

NO. 66-S TERMINAL STRIPS

No. 9-60

(9 Terminals)

.57

Terminal .032" Hard Brass, Cadmlum Plated

A heavy solder terminal with large oval hole for several Notes.

Insulation: XP Bakelite, 34" wide, 31" thick. Terminals

mounted on	3/8" centers. N	founting	holes 5/8" from	center of end terr	ningls.
Code		Ea.	Code		Ea.
No. 2-66-S	(2 Terminals)	\$.09	No. 6-66-S	(6 Terminals)	\$.22
No. 3-66-S	(3 Terminals)	.12		(7 Terminals)	.25
No. 4-66-S	(4 Terminals)	.15		(8 Terminals)	.29
No. 5-66-S	(5 Terminals)	.19		(9 Terminals)	.32



NO. 48 TERMINAL STRIPS

Terminal .028" Brass, Tin Plated

A low priced double solder terminal. Insulation: XP Bakelite, V_2 " wide, h" thick. Terminals mounted on v_2 " centers. Mounting holes v_3 " from center of

end termin	ais.					
Code			Ea.	Code		Ea.
No. 2-48	(2	Terminals)	\$.08	No. 6-48	(6 Terminals)	\$.21
No. 3-48	(3	Terminals)	.11	No. 7-48	(7 Terminals)	.24
No. 4-48	(4	Terminals)	.14	No. 8-48	(8 Terminals)	.28
No. 5-48	(5	Terminals)	.18	No. 9-48	(9 Terminals)	.31



NO. 66-D TERMINAL STRIPS

Terminal .032" Hard Brass, Cadmium Plated
Two No. 65 terminals mounted on opposite sides of panel
and riveted together by solid rivet. Ideal strip for heavy
work.
Insulation: XP Bakelite, ¾" wide, ¾" thick. Terminals
mounted on ¾" centers. Mounting holes ¾" from center

of end term	inals.				
Code		Eq.	Code		Ea.
No. 2-66-D	(2 Terminals)	5 .11	No. 6-66-D	(6 Terminals)	\$.29
No. 3-66-D	(3 Terminals)	.15	No. 7-66-D	(7 Terminals)	.33
No. 4-66-D	(4 Terminals)	.20	No. 8-66-D	(8 Terminals)	.37
No. 5-66-D	(5 Terminals)	.24	No. 9-66-D	(9 Terminals)	.42



NO. 50 TERMINAL STRIPS

Terminal .062" Brass, Cadmium Plated

One of the most popular screw and solder terminals.

Made of heavy stock with ears to firmly hold wires under screw.

Screw: 8-32 x A" brass, binder head, burnished nickel plate. Insulation: XP Baxelite 3" wide, 1/6" thick Terminals spaced on 1/3" centers. Mounting holes 1/2" from center of end terminals.

A3 Counters	Mounting note	8 77 1101	n center or e	na terminata.	
Code		Ea.	Code		Ea.
No. 2-50	(2 Terminals)	\$.21	No. 6-50	(6 Terminals)	\$.43
No 3-50	(3 Terminals)	.26	No. 7-50	(7 Terminals)	.48
No. 4-50	(4 Terminals)	.32	No. 8-50	(8 Terminals)	.54
No. 5.50	(5 Terminals)	.37	No. 9-50	(9 Terminals)	.59



NO. 76 TERMINAL STRIPS

Terminal .028" Brass, Cadmium Plated

Cup shaped top holds wire securely under screw. A compact and good appearing terminal.

Screw. 6-32 x A'', brass, binder head, burnished nickel plate. Insulation: XP Bakelite, 34" wide, A'' thick. Terminals spaced on \(\frac{1}{2} \)' centers. Mounting holes \(\frac{1}{2} \)' from center of end terminals.

Code

Ea. | Code | Ea. |

Code		Eu.	C048		EQ.
No. 2-76	(2 Terminals)	\$.15	No. 6-76	(6 Terminals)	\$.33
No. 3-76	(3 Terminals)	.20	No. 7-76	(7 Terminals)	.37
No. 4-76	(4 Terminals)	.24	No. 8-76	(8 Terminals)	.42
No. 5.76	(5 Terminals)	.29	No. 9-76	(9 Terminals)	.46

CINCH-JONES SALES * ELECTRICAL CONNECTING DEVICES



AG-76

Standard Antenna-Ground strip using No. 76 terminals. Insulation: A" Bakelite, H" wide. Mounting centers 1H". Ends rounded. Letters A and G are filled in white.

No. AG-76 Ea. S .13

NO. 96 TERMINAL STRIPS

Terminal, Spring Temper Brass, Cadmium Plated

Perhaps the most popular socket terminal ever sold.

Takes standard tube prongs (No. 99 or No. 100). Furnished for No. 99 prongs (Vg") unless otherwise specified.

Insulation: XP Bakelite. 36" wide, 14" hinck. Terminals mounted on 15" centers. Mounting holes 14" from center of end terminals.

Code		Ea.	Code		Ea.
No. 2-96	(2 Terminals)	\$.09	No. 6-96	(6 Terminals)	S .22
No. 3-96	(3 Terminals)	.12	No. 7-96	(7 Terminals)	.25
No. 4-96	(4 Terminals)	.15	No. 8-96	(8 Terminals)	.29
No. 5-96	(5 Terminals)	.19	No. 9-96	(9 Terminals)	.32



NO. 98 TERMINAL STRIPS

Terminal 3/32" Round, Brass, Cadmium Plated

Standard tube base prong of \mathfrak{H}'' diameter. To be used with No. 53 terminal strips. Insulation: XP Bakelite, \mathscr{H}'' wide, \mathfrak{H}'' thick. Terminals mounted on \mathfrak{H}'' centers.

Code		Ea.	Code		Ea.
No. 2-98	(2 Terminals)	S .08	No. 6-98	(6 Terminals)	\$.21
No. 3-98	(3 Terminals)	.11	No. 7-98	(7 Terminals)	.24
No. 4-98	(4 Terminals)	.14	No. 8-98	(8 Terminals)	.28
No. 5-98	(5 Terminals)	.18	No. 9-98	(9 Terminals)	.31



NO. 99 TERMINAL STRIPS

Terminal 1/8" Round, Brass, Cadmium Plated

Similar to No. 98, except that it is V_8''' in diameter. To be used with No. 42 terminal strips, and also with No. 96 terminal strips. Insulation: XP Bakelie, V_2'' wide, V_3'' thick. Terminals mounted on V_2'' centers.

Code		Eα,	Code		Ea.
No. 2-99	(2 Terminals)	S .11	No. 6-99	(6 Terminals)	S .29
No. 3.99	(3 Terminals)	.15	No. 7-99	(7 Terminals)	.33
No. 4-99	(4 Terminals)	.20	No. 8-99	(8 Terminals)	.37
No. 5-99	(5 Terminals)	.24	No. 9-99	(9 Terminals)	.42



NO. 100 TERMINAL STRIPS

Terminal 5/32" Round, Brass, Cadmium Plated

Similar to No. 99, except $\frac{1}{2}$," in diameter. To be used with No. 43 terminal strip, and No. 96 terminal strip. Insulation: XP Bakellte, $\frac{1}{2}$," wide, $\frac{1}{2}$," thick. Terminals mounted on $\frac{1}{2}$," centers.

Code		Ea.	Code		Ea.
No. 2-100	(2 Terminals)	\$.17	No. 6-100	(6 Terminals)	\$.40
No. 3-100	(3 Terminals)	.23	No. 7-100	(7 Terminals)	.45
No. 4-100	(4 Terminals)	.29	No. 8-100	(8 Terminals)	.51
No. 5-100	(5 Terminals)	.34	No. 9-100	(9 Terminals)	.56



NO. 130 TERMINAL STRIPS

Terminals Brass, Burnished Nickel Plate
An inexpensive terminal strip with two screw terminals.
Screws: 5-40 x A'' brass, binder head, burnished nickel
plate. Insulation: XP Bakelite, 7/g'' wide, A'' thick.
tet on lev' centers. Mounting holes W'' from center.

Terminals mounted on 1/2"	centers.	Mounting ho	108	√2 irom ce	nter of
end terminals. Code	Ea.	Code		,	Ea.
No. 2-130 (2 Terminals)	\$.17			Terminals)	
No. 3-130 (3 Terminals)	.25			Terminals)	.61
No. 4-130 (4 Terminals)	.34	No. 8-130	(8	Terminals)	.69
No. 5-130 (5 Terminals)	.43	No. 9-130	(9	Terminals)	.78

NO. 131 TERMINAL STRIPS

Terminals Brass, Burnished Nickel Plate

Similar to No. 130, except larger.
Screws: 6-32 x ¼" brass, binder head, burnished nickel
plate. Insulation: XP Bakelite, 1" wide, ¾" thick.
Terminals mounted on %" centers. Mounting holes %"

from center o	f end termino	ıls.			
Code		Eα.	Code		Ea.
No. 2-131 (2 No. 3-131 (3 No. 4-131 (4 No. 5-131 (5	Terminals) Terminals)	\$.21 .31 .41 .51	No. 7-131 No. 8-131	(6 Terminals) (7 Terminals) (8 Terminals) (9 Terminals)	\$.61 .70 .80 .90



NO. 132 TERMINAL STRIPS

Terminals Brass, Burnished Nickel Plate
Similar to No. 131, except larger.
Screws 8-32 x A' brass, binder head, burnished nickel plate Insulation: XP Bakelite, 11/4" wide, 1/5" thick. Terminals mounted on 3/4" centers. Mounting ther of end terminals.

11016	2 74	110111	centrer or er	14	1011111	11415.					
С	ode			1	Ēα.	1	ode			E	a.
No.	2-132	(2	Terminals)	\$.25	No.	6.132	(6	Terminals)	\$.69
No.	3-132	(3	Terminals)		.36				Terminals)		.80
No.	4-132	(4	Terminals)		.47				Terminals)		.91
No.	5-132	(5	Terminals)		.58	No.	9-132	(9	Terminals)	1	.02



No. 143 TERMINAL STRIPS

Terminal .040" Brass, Tin Plated strong two-way solder terminal. Solder tabs flat. Crimps securely around edges of panel.

Special Strlps
These strips can be made up special, with terminals mounted on any centers, from 36" up.

Standard Strips
Insulation: XP Bakelite, \(\frac{1}{2}\)'' "wide, \(\frac{1}{2}\)'' Thick. Terminals mounted on \(\frac{1}{2}\)'' reminals may be numbered or lettered in white, as illustrated. (See page 18 for imprinting cost.)

Code			Ea.	Code		Ea.
No. 2-1	143 (2	Terminals)	S .11		(6 Terminals)	
No. 3-1	143 (3	Terminals)	.14		(7 Terminals)	.28
No. 4-1	143 (4	Terminals)	18		(8 Terminals)	.31
No. 5-1	143 (5	Terminals)	.21	No. 9-143	(9 Terminals)	.34



N

No. 170 TERMINAL STRIPS

Terminal .032" Brass, Tin Plated

A heavy solder Terminal.

Insulation: Black molded Bakelite, 4," wide, 1/4" thick. Terminals mounted on 3," centers. Mounting

		hole	s are 3/8"	from ce	enter of	end	Terminals.		-
Code			Eα.	Co				E	α.
No. 1-17	0 {1	Terminal)	\$.18	No.	6-170	(6	Terminals)	S	.40
No. 2-17	70 (2	Terminals)	.22	No.	7-170	(7	Terminals)		.44
No. 3-17	0 (3	Terminals)	.26				Terminals)		.48
No. 4-17	0 (4	Terminals)	.31				Terminals)		.53
No. 5-17	0 (5	Terminals)	.35	No.	10-170	(10	Terminals)		.57



NO. 2000 TERMINAL STRIPS

Terminals .019" Brass, Tin Plated

Compact and sturdy function terminal strip. Useful in assembling radio chassis, strip Useful in assembling radio chassis, wiring, etc. Insulation: Bakelite. Brackets: Steel, cadmium plated. Terminals spaced on A"centers.

Code		Mounting Hole Centers:	Per 100
No. 2002	(2 Terminals)	1"	\$ 7.04
No. 2003	(3 Terminals)	1-5/16"	7.70
No. 2004	(4 Terminals)	15/8"	8.36
No. 2005	(5 Terminals)	1—15/16"	9.02
No. 2006	(6 Terminals)	2—1/4"	9.68
No. 2007	(7 Terminals)	2-9/16"	10.34
No. 2008	(8 Terminals)	27/8"	11.00
No. 2009	(9 Terminals)	3—3/16"	11.66
No. 2010	(10 Terminals)	3-1/2"	12.32
No. 2011	(11 Terminals)	3—13/16"	12.98
No. 2012	(12 Terminals)	4—1/8"	13.64
No. 2013	(13 Terminals)	4-7/16"	14.30

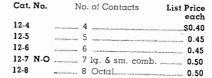
--- EBY SALES COMPANY ---

SOCKETS



MINIATURE SHOCK SHIELD TYPE: 7 prongs, 7/8" mounting centers

List Price 8322 Black bakelite, phosphor bronze 0.32 contacts 8328 Ceramic, phosphor bronze contacts 8329 Mica-filled bakelite, phosphor



TYPE 12 SOCKETS

Phosphor bronze contacts, 1-11/16" mounting centers



MINIATURE SADDLE TYPE:

7 prongs, 7/8" mounting centers

			each
	832 3	Black bakelite, phosphor bronze	
1		contacts (with center grounding shield)	\$0.17
9	8539	Black bakelite, phosphor bronze	
		contacts (no center grounding shield)	0.15
	8326	Ceramic, phosphor bronze contacts (with center grounding shield)	0.45
	8327	Mica-filled bakelite, phosphor	
		bronze contacts (with center grounding shield)	0.20

SHIELDS FOR MINIATURE SHOCK

Steel, cadmium plated with inner spring

SHIELD TYPE SOCKETS:

FOR MINIATURE SADDLE TYPE SOCKET:

8757 Height 13¼". Steel, cadmium plated \$0.10

LAMINATED MINIATURE SOCKETS:

7797 Height 13/4".....

8758 Shield holder

Cat. No.

Cat. No.

47-2

47-9

OCTAL SADDLE TYPE:

Cat. No. 9067 Black bakelite, steel saddle, cadmium plated with 4 ground lugs. Mounting centers, 1-5/16". Brass contacts, cadmium plated..................................List Price \$0.13 ea.



LOCTAL SADDLE TYPE:

Cat. No.

List Price

List Price

List Price

..... 0.05

SO.19

8451 Black bakelite, steel saddle, cadmium plated with 4 ground lugs. Mounting centers 1,5/16". Phosphor bronze contacts, cadmium plated

List Price \$0.17 eg.



OCTAL ALL-MOLDED TYPE:

Cat. No.

Black bakelite, mounting centers 1-5/16". Brass contacts, cadmium plated List Price \$0.14 ea. 8490 Black



LOCTAL ALL-MOLDED TYPE:

Cat. No.

Black bakelite, mounting centers 1-5/16". Phosphor bronze contacts, cadmium platedList Price \$0.16 ea. 8191 Black

MAGNAL TYPE TELEVISION SOCKET:

S-20-11 Black bakelite, phosphor bronze con-



Cat. No.

tacts, cadmium plated. 11 contacts.
Supplied with press-on permanent mounting ring......List Price \$0.85 ea.

DUO DECAL TYPE TELEVISION SOCKET: Cat. No.

9700 Accommodates up to 12 pins. Top diameter is 1-23/32"; overall depth is 63/64". Contacts recessed to avoid shorting ______List Price \$1.10 ea.



DI HEPTAL TYPE TELEVISION SOCKET: Cat. No.

9709-6 Heavy-duty type, accommodates up to 14 pins. Top diameter is 2-7/32"; overall depth is 63/64". Contacts recessed to avoid shorting.

List Price \$1.20 ea.



List Price

CRYSTAL SOCKET

For crystals having .050 diameter pins and .486 spacing between pins. Steatite, grade L-5 JAN-1-10. Contacts: Phosphor bronze, cadmium plated, or beryllium copper, silver plated with tabs tinned.

Phosphor Bronze Contacts...\$0.40



Beryllium Copper Contacts... 0.60

SO-200 For crystals having ¾" centers and .135 diameter. Banana type or .156 solid type pins. Insulator: Low Loss Phenolic. Contacts: Beryllium Copper, Silver Plated 0.65

OCTAL TYPE:

Cat. No. 46-5-E 8 prong:

Dimensions: Mounting Centers Overall Width 1-5/16" 1-13/32'' 1-5/8'' Overall Length List Price \$0.10 ea.

Cat. No. 46-1-E 8 prong:

Dimensions: Mounting Centers 1-1/2"
Overall Width 1-13/32"
Overall Length 1-27/32" List Price S0.10 ea.



GLASS THRE TYPE.

			CANION IODE IIIE.						
Cat. No.			Mounting	Centers	Width	Length	List Price each		
34-1 A A	4	prong		11/2"	13/8"	17/8"	\$0.10		
34-1-B	5	prong	A	11/2"	11/2"	17/8''	0.11		
34-1-C	6	prong	*******	11/2"	11/2"	17/8"	0.12		
34-1-DX	7	prong	***************************************	11/2"	11/2"	17/8''	0.13		

— EBY SALES COMPANY ——

PLUGS



MOLDED BATTERY PLUGS

Cat.	Number of	f	Batt.	List Price
No.	Prongs	Volts		each
30-2 30-3B 30-3C 30-4L 30-5 30-71/2	2 3 3 4 5 5	3 45 4½ 22½ 7½	A B C A & B C C	\$0.09 0.09 0.09 0.09 0.11 0.11



Cat. No.	Number o	of Volts	Batt.	List Price each
30-2M 30-2M3 30-3M	2 2 3	1½ 6 45	A A Midget	\$0.08 0.09 0.08



MOLDED SPEAKER PLUGS

Cat. No.	No. of Prongs	List Price ea.
29-4	4	\$0.11
29-5	5	0.11
29-6	6	0.12
29-7	7 .750 layout	0.13



Cat. No.	No. of Prongs	List Price ea
28-6	6	\$0.20
28-4	4	0.21
28-5	5	0.24
28-7	7 .750 layout	0.26



LAMINATED BATTERY PLUGS

	m			
Cat.	Number of	of	Batt.	List Price
No.	Prongs	Volts		each
66-2 66-2M 66-2M 66-3B 66-3C 66-3M	2 2 2 3 3 3 3	3 1½ 6 45 4½ 45	A A A B C Midget B	\$0.06 0.05 0.05 6.07 0.08
66-4MS	5 4	41/2	A & B	0.07
66-4	4		A & B	0.09
66-4½	2		A	0.05
66-8	9		A & B	0.13

T-30

BINDING POSTS



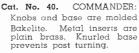
Cat. No. 37. ENSIGN: Knobs and base are molded Bake-lite. Metal inserts are plain brass. Knurled base prevents post turning.

Knob: ½" diam. x 7/16" high.
Base: ½" diam. x ¼" thick.
Solid Stem: 6/32" x 5%" long.
Drilled Neck Diameter: 3/16" Width of contact flanges: 3/8"

List Price S0.35 ea.

Cat. No. 38. ENSIGN: Same as No. 37 except that it has α molded insulating boss on List Price \$0.37 ea.

Cat. No. 39. ENSIGN: Same as No. 37 except that it has molded dowel pin on base. List Price \$0.37 ea.



Knob: 9/16'' diam. x 1/2'' high. Base: 5/8'' diam. x 1/4'' thick. Solid Stem: 8/32'' x 7/8'' long. Drilled Neck Diameter: 13/64'
Width of contact flanges: 7/16' List Price S0.50 eg.

Cat. No. 41. COMMANDER: Same as No. 40 except that it has a molded insulating boss on base. List Price \$0.55 ea.

Cat. No. 42. COMMANDER: Same as No. 40 except that it has a metal dowel pin on base. List Price \$0.55 ea.

Cat. No. 43. ADMIRAL: Knobs and base are molded Bake-lite. Metal inserts are plain brass. Knurled base prevents post turning.

Knob: 5%" diam. x 17/32" high.
Base: 23/32" diam. x 14" thick.
Solid Stem: 8/32" x 34" long.
Plain Neck: 13/64" diameter. Width of contact flanges: 7/16".

List Price \$0.60 ea.

Cat. No. 44. ADMIRAL: Same as No. 43 except that it has molded insulating boss on base. List Price \$0.55 ea. Cat. No. 45. ADMIRAL: Same as No. 43 except that it has a molded dowel pin on base.

List Price \$0.55 ea. Cat. No. 43-S. ADMIRAL: Same as No. 43 except that it has a elongated slot in neck. List Price S0.65



posts is 7/8".

Cat. No. 21-R. All-molded Bakelite, non-able tops. Both completely inst non-removinsulated. Center mounting screw 6/32" x ½" long. Base is 2" long, 11/16" wide and 3/16" thick. Center distance between List Price \$0.70 ea

Cat. No. 21-S. All-molded Bakelite, non-remov-able tops. One post is insulated completely One mounting screw 6/32" x 1/4" long. 6/32" x 1/4" long. Ground post is second mounting screw. Base is 2" long, 11/16"

wide and 3/16" thick. List Price \$0.70 ea.

TIP JACKS

Cat. No. 49. Top diameter 1/2" x 5/32" thick. Threaded brass body 5/16"-32 x 3/4" long. One hexagon nut and two insulating washers furnished. Hole for washers is 19/64". Red or Black Bakelite top.



List Price: RedS0.19 ea. Black ... 0.17 ea.

Cat. No. 52. Top diameter 1/2" x 1/8" thick. Body is 5/16" x 3/4" long. Special steel assembly washers, cadmium plated, are furnished. Red or black Bakelite.

> List Price: Red\$0.10 ea. Black ... 0.09 eα.



Cat. No. 76. Top diameter $\frac{5}{8}$ " x $\frac{5}{32}$ " thick. Body is .495" x 5/8" long. Special steel assembly washers, cadmium plated, are furnished. Red or black Bakelite. List Price: Red\$0.18 Black... 0.15



Cat. No. 17. This twin jack with molded Bakelite base, is provided with two terminals 13/8" apart and has a 6/32" x 1/4" mounting screw at center.

List Price \$0.65 ea.



Cat. No. 18. Twin jack, is provided with two terminals 7/8" apart and has two .140" diameter holes, 1-11/16" centers. Bottom plate is 1/16" thick, top plate 1/32" thick. 5/8" wide x 2-1/16" long.

List Price \$0.13 ea.



Cat. No. 18-T. Triple jack is provided with three terminals 9/16" apart and has two .140" diameter mounting holes, 1-15/16" centers. Bottom plate is 1/16" thick, top plate 3/64" thick. 5/8" wide x 23/8" long.

List Price \$0.19 ea.

American Beauty

ELECTRIC SOLDERING IRONS

These Irons embody features that specialized experiencesince 1894—has demonstrated to be desirable for efficient and lasting service. Hundreds of thousands in use throughout the world in manufacturing plants, service, maintenance and repair shops, Army and Navy Services, telephone, telegraph and radio stations.

No. 3138—Designed primarily for production and maintenance in radio, telephone, telegraph, ignition switchboard and telephone installation work and similar industrial applications. No. 3158 For the same purposes as the No. 3138 but for work

requiring an iron of greater capacity.

No. 3178—For use on still heavier work; for light commutators and service and production work. A very useful iron

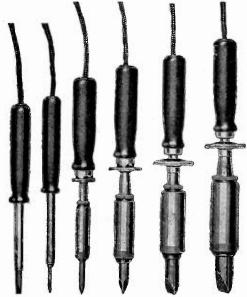
for general purposes. No. 3198—For heavy work of all kinds. Supplies a large volume of heat at high temperature. Used by manufacturers in many different lines; for shop, service, production work, etc. Each of the above irons is equipped with a baffle plate, at the shank, to prevent free conduction of heat to the handle.

No. 3128—Designed for lighter work than the No. 3138 in similar applications. Has plug-type ¼"-diameter tip with a heating element of chrome nickel but without compression winding as used in the higher-wattage No. 3138-3198 series. Element and casing with handle springs and terminal assembly built as a unit.

No. S-76—Designed for work of the same kind as the No. 3128 but has a screw-type $\sqrt{6}$ " diameter tip which screws on the metal head of the core of the chrome nickel heating element. Element with

casing and handle springs and terminal assembly built as a unit.

Made in standard voltages and for 32 volts. No. 3138 also made for 6, 12, 24 and 55 volts. Nos. 3138-3198 can be equipped with three-conductor cord, one wire grounded, at slight additional charge. Separate heatinsulating stand supplied with each iron.



3138 3158 3178 3198 3128

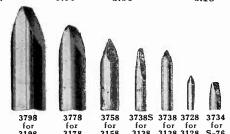


Top No. 3128 - Bottom No. 5-76

				SPEC		10p No. 3128 — Bottom No. 2-10			
Cat. No.	Diameter of Tip	Watts	Net Weight	Length Over All	Casing Diameter	Approx. Ship. Wt.	List Price Each	Net Price Each (Less than 6)	Net Price Each (6 or more)
3138	3/8 "	100	16 oz.	12 % "	7/8 "	2 lbs.	\$ 8.00	\$ 5.36	\$ 5.08
3158	5/8 "	200	28 oz.	13 5/8 "	1 1/4 "	3 lbs.	9.60	6.41	6.07
3178	7/8 "	300	42 oz.	14 3/8"	1%6"	4 lbs.	12.90	8.59	8.11
3198	1 1/8 "	550	60 oz.	15"	1 3 4 "	5% lbs.	16.80	11.18	10.58
3128	1/4 "	60	$7\frac{1}{2}$ oz.	121/4"	9/16"	16 oz.	5.00	3.34	3.18
S-76	7/46"	50	6 oz.	115%"	9/10"	14 02	5.00	3 34	3.18

American Beauty copper tips

These copper tips are made from commercially pure, drawn bar, copper rod. Except for the No. 3734 screw-on type tip for the No. S-76 iron, each tip is designed to fit into, and to the full length of, core of heating unit of the particular iron for which it is intended. Maximum area of contact between the tip and heating unit is thus assured. Tips are of uniform diameted throughout their entire length. Each tip is held in place in core of heating unit by a recessed set-screw, Removal for cleaning or replacement is therefore easy. Standard shaped tips with which the various models are equipped are shown in the illustration; but pyramidal. instead of chisel type, and vice versa, can be supplied when so specified without additional charge. For No. 3138 a special, long, semi-chisel shaped tip No. 3738-S can be supplied for telephone and switchboard work.



American Beauty

TEMPERATURE REGULATING

For use on (AC) Alternating Current Only

This is a thermostatically controlled device for the regulation of the temperature of an electric soldering iron while at rest. When placed on this stand, soldering iron is maintained at working temperature, ready for instant use or, if desired, at a lower temperature. Through an adjustment on bottom of the stand, thermostat may be set for the maintenance of any desired temperature—from very low, or warm, to full working temperature. Body of stand is of molded plastic. Soldering iron cradle proper is of metal. Stand is equipped with cord and attachment plug-cap for connection to current and with a receptacle for connection of the electric soldering iron. It is designed for use with electric soldering irons up to 660 watts capacity and on circuits up to 240 volts.

Cat. No. 475

Net Weight 27 oz.

List Price \$5.50

Net Price \$3.88

ESICO

ELECTRIC SOLDERING IRONS FOR HOME, PROFESSIONAL MECHANIC AND FACTORY

GREEN LABEL LINE

For intermittent duty. Meets all requirements of the home craftsman.

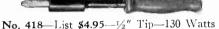


No. 415-List \$1.95-3/8" Tip-55 Watts



No. 416-List \$2.95-1/4" Tip-60 Watts





ORANGE LABEL LINE

For Professional Mechanics—light or heavy sold-ering where iron must withstand operation for eight hour periods or more on frequent occasions.



No. 62-List \$4.95-1/4" Tip-



No. 63—List \$5.95—3/8" Tip—100 Watts



No. 64—List \$6.95—1/2" Tip—130 Watts



No. 65-List \$7.95-5/8"



300 Watts



No. 69-List \$10.95-11/8" Tip-500 Watts

RED LABEL LINE

For Production Line Continuous Operation, These Irons are of most rugged construction.



No. 38-List \$6.95-3/8"



200 Watts No. 58-List \$8.95



No. 78-List \$10.95-78" Tip--300 Watts



No. 98-List \$12.95-11/8" Tip-550 Watts

Thermostatic Temperature **Control Stand**

The iron can be maintained at any desired temperature while in the stand. This is the only way to control the tip temperature of an iron. Control of element temperature is not satisfactory. There is too much of a lag between element and tip temperature.

Years ago we developed a thermostatically controlled iron, which regulated the element temperature

(just as presently marketed thermostatically controlled irous do) but we discarded the iron as it would permit the tip to cool.

When the stand is properly adjusted, it is impossible for the iron to overheat or to burn off its tin.

OVCI	iicat (01	10 1711111	011												L	ist l	Price	3
Cat.	No.	5	Irons up	to	1"	lia.	tip		 	 	 		 	 			\$	6.50)
Cat.	No.	5	Irons up	10 1	5/8"	dia	. ti	р.	 	 	 		 	 				6.50)

Soldering Pots



Ruggedly constructed, cast iron pots for production work. Elements are easily replaced even while pots are hot.

Net I	rice
Cat. No. 12—1½" dia. Cap.	
3/4 lbs	4.50
Cat. No. 36—2½" dia. Cap.	
2 ¹ / ₄ lbs	5.50
Cat. No. 60-31/2" dia. Cap.	
33/4 lbs	6.50

Spot Soldering Machine

Model "F" is a treadle operated machine which feeds solder forward as the iron moves away from the work. Suitable for spot soldering where a mechanical connection has first been made. Net price\$15.00

Model "N" is a treadle operated machine for the advancement of the iron, but without a solder feed attachment. Net price\$7.50





Glue Pots

The catalogue No. 700 Glue Pot is of two quart capacity. It is the water jacket type and has a gasket sealed element and thermostat completely protected from moisture. Thermostat is normally set at 150 degrees for use with glue, but can be set at various temperatures for use with wax, etc. Net price \$18.50

ELECTRIC SOLDERING IRON CO., INC.

DRAKE RADIO IRONS

Suggested for Maintenance Work and for the Radio Service Man



60 Watt Iron with %" Tip. An excellent iron for light work. Porcelain element. Six ft. cord and small stand.

No. 315			List	\$1.90
Element	\$1.00	Tip	List	\$0.90
Sh	pping V	Weight 1 lh.		

100 Watt Iron with 3/8" Tip. An ideal iron for those who require a hotter iron than our No. 315. Porcelain element. Six ft. cord and small stand.

No. 316	•••••		List	\$3.20
Element	List \$1.50	Tip	List	\$1.80
	Shipping Weight 15	6 lbs.		



80 Watt Iron with %" Tip. Recommended for light radio work. Mica wound element. Six ft. cord and large stand.

No. 225			List	\$4.40		
ElementList	\$3.40	Tip	List	\$1.25		
Shipping Weight 11/2 lbs.						

100 Watt Iron with 3%" Tip. Recommended for general radio work. Mica wound element. Six ft. cord with large stand.

No. 325	List	\$5.00
ElementList \$4.00	TipList	\$1.25
Shipping Weight	2 lbs.	



125 Watt Iron with 3/8" Tip. An extra hot iron for the serviceman. Mica wound element. Six it. cord and large stand.

No. 326					List	\$6.00
Element	List	\$5.00		Tip	List	\$1.25
	Ship	ping	Weight 2	lbs.		

200 Watt Iron with $\frac{5}{8}$ " Tip. Recommended for medium heavy work. Mica wound element. Six it. cord and large stand.

No. 425						List	\$1	0.00
Element	List	\$9.00		,	Tip	List	\$	2.00
	Shir	ping	Weight	2	lbs.			

INDUSTRIAL IRONS



60 Watt Iron with $\frac{1}{4}$ " Tip. An extra small iron for midget sets. Only 9" long.

man bot both	O 111,	.0			
No. 400				List	\$5.50
Element	List \$	4.50	Tip	List	\$0.60
	Shipp	ing W	eight 2 lbs.		

100 Watt Iron with %" Tip. Only 10 inches over all. Ideal for close work on radio sets.

ı	No. 600-10]	List	\$8.00
	Element	List \$7.00	Tip]	List	\$1.25
ı		Shipping Weight	2 lbs.		

140 Watt Iron with $3'_8$ " Tip. An extra hot iron for high speed work on production lines.

No. 600	Special	List	\$8.50
Element	List \$7.50	TipList	\$1.25
	Shipping W	eight 2 lbs.	



80 Watt Iron with 3/8" Tip. Recommended for fine instruments, light telephone and other light soldering.

No. 450						List	\$6.00
Element	List	\$5.00		7	Гір	List	\$1.25
	Ship	ping	Weight	2	lbs.		

100 Watt Iron with 3/8" Tip. The standard 100 watt iron. Ideal for switchboards and radio sets.

No. 600			List \$7.50
Element	List \$6.50	Tip	List \$1.25
	Shipping Weigl	nt 2 lbs.	

200 Watt Iron with 5%" Tip. For general factory work such as art glass, medium tin work.

	No. 800		List	\$10.00
	Element	List \$9.00	TipList	\$ 2.00
		Shipping	Weight 3 lbs.	

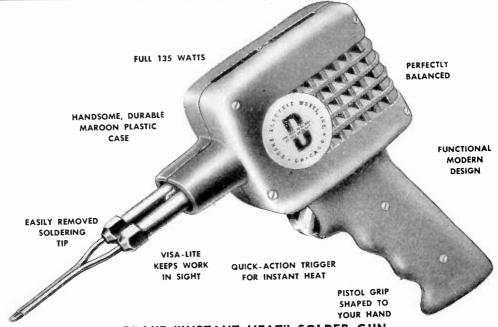


MODEL 350 MIDGET

Recommended for voice coil leads on speaker cones, meter connections, test equipment, hearing aids, crystal pickups, headphone leads, etc. This iron is a continuous duty 35 watt iron with a nickle-chromium element wound over mica insulation on a steel core.

No. 350			List	\$5.00
Element	List \$4.00	Tips, ea	List	\$0.25
	Shipping Wei	ight 1 lb.		

SOLDER GUN DRAKE HEAT CONTROLS SOLDER POTS



DRAKE "INSTANT HEAT" SOLDER GUN

A new addition to the famous "Drake" family of complete soldering aids. Instant-heat solder gun for quick soldering requirements. Saves power since gun only operates when trouble-free trigger is squeezed. Equipped with built-in spotlight, properly focused to light soldering spot. Attractive maroon plastic case properly louvered for cool operation. Balance engineered by one of America's most famous industrial designers. Complete with easily removed tips, one 31/2" tip for ordinary soldering; one 61/2" tip for deep chassis soldering. Operates on

110-120 volt, 60-cycles A.C., 135 watts. Shpg. wt., 3 lbs.

No. 900 Solder Gun, complete with 2 tips; one ½"and one 6½" List Price \$20.00 No. 902 Extra 61/2" Tips (2 to pkge.) List Price \$0.50 No. 901 Extra 3½" Tips (4 to pkge.) List Price \$0.50

No. 100.....

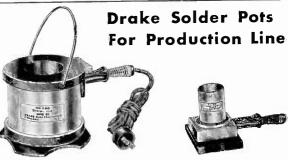


New thermostatically controlled, automatic, heat controls. Ideal for production applications where iron must be kept at correct soldering temperatures at all times. Complete with oxide removing "Magic Cup." Choice of with or without hood. Operates on 110 to 240 volts and will handle any iron to 660 watts. Shpg. wt., either model: 3 lbs.

.....List Price \$7.50 No. 305 Less HoodList Price \$8.50 No. 305H With Hood

Standard Models These standard economy models have stand-by switch instead of thermostats. Keep switch in low position until iron is almost ready for use. A flip of the switch and the iron is ready for use in a few moments. Variable resistor allows individual adjustment to meet the requirements of each soldering operation. Operates on 110 volts. Shpg. wt., either model: 3 lbs.

No. 300 Less Hood List Price \$5.50
No. 300H With Hood List Price \$6.00



Model No. 200—300 Watt Unit

An ideal electric solder pot for production use. Used in factory production of tinned wire ends, terminal tinning and countless other volume tinning applications. Holds 2 lbs. of bar solder in 21/2" diameter 2" deep cast iron well. Complete with detachable Underwriters' Approved cord and plug, and bale type carrying handle. Genuine nichrome element. Shipping weight 6 lbs.

No. 200 List Price \$6.50

Model No. 100—150 Watt Unit Designed for light tinning. Ideal for occasional jobs. Suited especially for tinning ends of stranded wires to prevent fraying. Can also be used for soldering cord tips to cables. One piece cast iron construction holds heat longer. Size of pot 1½" diameter 1" deep. Holds 1 lb. of bar solder. Complete with Underwriters' Approved cord and detachable plug. Shipping weight 3 lbs. List Price \$5.00

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CALROD* SOLDERING IRONS

FOR EVERY RADIO REQUIREMENT

MANUFACTURING — SERVICE

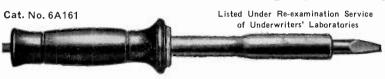
*Reg. U. S. Pat. Off.

- HIGH-SPEED SOLDERING. You can solder as fast and continuously as the nature of the work will allow.
- UNIFORM PERFORMANCE, Operating characteristics remain constant day after day. No appreciable decrease in efficiency even after months of
- LONG LIFE AND LOW MAINTENANCE, Long

life is assured and over-all costs are kept low because sturdy construction eliminates need of frequent repairs.

• EASY, LOW-COST REPAIR. Assembling and disassembling are easy.

• THEY NEED NOT BE RETURNED TO THE FAC-TORY FOR REPAIR. Irons can be repaired on the job without special tools or skill.



Watts 75

Volts 115

Calorized tip\$9.55*† IRONCLAD tip10.20*†

Tip diam. See note below*

For light, intermittent soldering such as radio assembly and repair and installation, switchboard, ignition, wiring devices, meters and instruments, or very light high-speed soldering of similar products.

WEIGHTS: Less cord, oz. With cord, 20 oz. Shipping, 26 oz. Equal to old-style copper—

1 1/4 - Ib.

*Cat. No. 6A161 and Cat. No. 6A162 can be supplied with either a %- or $\frac{1}{2}$ -inch diameter tip at prices given. The long $\frac{1}{2}$ -inch diameter tip projects $3\,\%$ inches from the shell. Price of iron with long calorized tip—\$10.10; with long IRONCLAD tip—\$10.90. For light, high-speed soldering, such as assembly of radios, telephones, switch-boards, appliances, meters, boards, appliances, meters, and instruments, and instruments, and installation and repair of wiring and wiring devices, ignition. Excellent for service and repair men.
WEIGHTS: Less cord, 15 oz. With cord, 20 oz. Shipping, 26 oz.
Equal to old-style copper—
1 3/2 1b.



Watts 100

Volts 115

Calorized tip\$9.55*t IRONCLAD tip10.20*+

Tip diam. See note above*

3/a-in. 1/2-in. 1/2-in.



Cat. No. 6A200



Watts 100

Volts 115

Calorized tip IRONCLAD tip

\$10.80+ 12.20+ Tip. diam. 34 inch

For light, high-speed soldering, such as assembly of radios and switchboards, medium intermittent soldering on tinware, wiring, plumbing, and tinsmith-ing. Excellent general-purpose iron for shop and farm.

WEIGHTS: Less cord, 16 oz. With cord, 21 oz. Shipping, 27 Equal to old-style copper—2-lb. 27 oz.

For medium, high-speed soldering of automobile and airplane ing of automobile and airplane assembly, electric equipment, light tanks and containers of copper and steel. Excellent general-purpose iron for manufacturing plant.
WEIGHTS: less cord, 24 oz. With cord, 29 oz. Shipping, 34 oz.

Equal to old-style copper-

Cat. No. 6A201



Watts 200

Volts 115

Calorized tip\$13.55† IRONCLAD tip 15.10

Tip. diam. 1 inch

Cat. No. 6A202



Watts 300

Volts 115

For heavy work such as light commutators, large - diameter pipe, medium-gage copper or steel tank and container material, roofing, heavy tinware, WEIGHTS: Less cord, 37 oz. With cord, 42 oz. Shipping,

Equal to old-style copper-

Calorized tip IRONCLAD tip 17.95† Tip. diam. 11/4 inch

ASK ABOUT IRONCLAD TIPS

IRONCLAD TIPS MEAN

- No Filing
- Lower Upkeep Cost
- Less Maintenance
- Longer Life

Note-230-volt irons available on request. Same prices apply. Above prices include supporting stand. ASK YOUR DISTRIBUTOR FOR A COPY OF BULLETIN GEA-4519. † Mfgr's suggested retail price.



Effect of solder C for 363.5 hours) on plain copper (left) and plain copper (left) and Ironclad copper (right)



MIDGET SOLDERING IRONS

FOR MANUFACTURING AND SERVICE OF RADIO AND ELECTRONIC EQUIPMENT

APPLICATION

This 8-inch, 1%-ounce featherweight iron for close-quarter soldering with pin-point precision is used where conventional irons might cause damage . . . be clumsy to handle . . . be more expensive to operate. The Midget literally goes places with greater efficiency and less power . . with no sacrifice in heat or speed. With its fingertip operation, this iron will help make an expert out of any solderer in a short time.

The Midget has chisel-shaped Ironclad copper tips either 1/8- or 1/4-inch diameter, as desired.

THIS MIDGET DOES A BIG JOB IN

- Boosting Production Rates
- Increasing Operator Efficiency
- · Cutting Down Employee Fatigue
- · Saving on Repair and Maintenance
- · Reducing Rejects
- Manufacturing and Repairing:

Radios and other electronic equipment

Meters

Instruments

Jewelry

Appliances

... and many other products requiring precision soldering

RATING: 6 VOLTS, 25 WATTS

Description	Cat. No.	Pricet
★!/g-in. Ironclad copper tip (pyramid-shaped)	6A212	\$5.40
★!/4-in. Ironclad copper tip (chisel-shaped)	6A210	5.40
1/8-in. Renewal tip and heater assembly	6A213	3.00
1/4-in. Renewal tip and heater assembly	6A211	3.00

Net weight iron less cord 1% oz. Net weight iron including cord 5 oz. Shipping weight complete iron 8 oz.

Standard package consists of 6 irons of one tip size. Tip and heater assemblies can be purchased in any quantities.

1/8-in. dia tip, Cat. No. 6A212



1/4-in. dia tip, Cat. No. 6A210

SPECIAL TRANSFORMERS (OPTIONAL) FOR G-E MIDGET SOLDERING IRONS





Single-tap, Cat. No. 84G392

Four-tap, Cat. No. 84G370

Specially designed 115-volt transformers are available as optional equipment in two types:

- Single-tap 115/6 volts—for use where only one soldering heat is required
- 2. Four-tap 115/6.3/6/5.7/5.4 volts gives wide range of heats (from 20 to 30 watts) for close temperature control of tips

Transformers are small, lightweight, but sturdy. Their 6-foot extension cords can be plugged in any 115-volt a-c circuit.

Description	Cat. No.	Price
Single-tap	84G392	\$5.20
Four-tap	84G370	7.80

THE MIDGET OFFERS MAJOR ADVANTAGES

Low-cost soldering—Solders more efficiently, using only approximately one-fourth wattage normally used.

Fingertip operation—Only 8 inches long, weighs but 1% ounces. Styled for fingertip grip.

Quick, continuous heat—Famous G-E Calrod* heater built into Ironclad copper tip for rapid heat transfer.

Easy renewal—Ironclad tip and heater can be replaced as a unit merely by unscrewing from handle.

Long life, low maintenance—Low voltage permits use of heavy, long-lasting resistant wire. Reduced servicing with long-lasting Ironclad copper tip.

- * Registered U.S. Patent Office,
- † Manufacturers' suggested retail price.

ELECTRIC SOLDERING IRONS





GENERAL INFORMATION—Equipped with 6 ft. (10,000 cycle) approved heater cord (covered with twine braid for extra long wear) and rubber plug. Continental or English type plugs 25c extra list. Metal stand furnished with each iron. Heating elements made of best grade nickel-chromium resistance wire, insulated with finest mica obtainable. Elements in the plug tip irons are replaceable by the user and in the screw tip irons replaceable at

the factory. Tips in all irons are replaceable; made of hard drawn the factory. The in all irons are replaceable; made of hard drawn pure copper. Case is made from solid flexacon steel (except No. 50 and P-30), affording it great mechanical strength, preventing denting. Terminal easily accessible and constructed to relieve cord strain. Smooth, cool, comfortable handle—readily replaceable. Voltage range: 32 to 250. Standard voltages 110/120, 121/130, 220/250. All other voltages \$1.00 extra list.

SCREW TIP IRONS



D—For light soldering on radio, telephone and electrical appa-50 Watts. Tip diam., 18". Ship. wt., 1 lb. Equal to ½-lb. No. 50al to ½-lb. ..each \$4.50 old style copper ..

No. 60—Medium light soldering on telephone, radio, apparatus and linemen's kits. 60 Watts. Tip diam., ½". Ship. wt., 1 ½ lb. Equal. to 1-lb. old style copper each \$6.25



No. 85—A high speed tool for telephone, radio and home use. 90 Watts. Tip diam., ½". Ship, wt., 1½ lb. Equal to 1½-lb. old style No. 85lb. old style each \$7.00 copper



No. 120—Light tinware, toys, typewriter, light auto, speed iron. 120 Watts. Tip diam., %". Ship. wt., 1% etc. A high lb. Equal 2-lb. old style copper each \$8.00



No. 130—Same as No. 120 except has larger tip and 10 more watts capacity. 130 Watts. Tip diam., %". Ship. wt., 15% lb. Equal to lb. Equal toeach \$8.75 2-lb. old style copper.....

No. 170—Medium tinware, small cans, auto repairs, pipes, gutters, toys, small motors. 175 Watts. Tip diam., 1". Ship. wt., 2½ lb Equal to 2½-lb. old style copper each \$10.00 wt., 2 1/4 lb. each \$10.00



No. 225-Medium tinware, cans, auto repairs, metal patterns, light roofing, small branders. 250 Watts. Tip diam., 11/8". Ship wt., 25/4 roofing, small branders. 250 Watts. T lb. Equal to 3-lb. old style copper..... each \$11.00



350—Heavy tinware, large cans, autos, roofing, refrigerators, and airplane. 350 Watts. Tip diam., 1 % ". Ship wt., 3 % lb. wt., 3 % lb. each \$13.00 Equal to 4-lb. old style copper.....



-Auto repairs, sinks, roofs, cans, armatures, large branders, etc. 500 Watts. Tip diam., 1%". Ship. wt., 4 lb. Equa tinsmiths, etc. 500 Watts to 5-lb. old style copper. each \$15.00

No. 700—For extra heavy soldering and large branders. 700 Watts. Tip diam., 1 % ". Ship. wt., 5 lbs. Equal to 7-lb. old style copper. each \$27.50

OPERATE ON A.C. OR D.C., ANY CYCLE

PLUG TIP IRONS



No. P-30—For extremely light soldering on finest wire and delic instruments. 40 Watts. Tip diam., ¼". Ship. wt., ½ lb. Equal ¼-lb. old style copper.....each \$4. and delicate

No. P-70—For light soldering on radio and telephone apparatus and electrical instruments. 80 Watts. Tip diam., %". Ship. wt., 1½ lb. Equal to 1-lb. old style copper.....each \$6.00



No. P-100—A high speed tool for telephone switchboards, electrical instruments, etc. 100 Watts. Tip diam., %". Ship. wt., 11/4 lb. Equal to 1 1/2 -lb. old style copper ...

No. P-125—For light tinware, toys, typewriter type bars, small cans, auto, etc. 130 Watts. Tip diam., %". Ship. wt., 1½ lb. Equal to 2-lb. old style copper......each \$8.50



No. P-150—Extra high speed iron for radios, electrical apparatus and where a light iron with small diameter is required. 150 Watts. Tip diam., %". Ship. wt., 1% lb. Equal to 2-lb. old style copper each \$7.75

No. P-151—Same as No. P-150, except where a larger tip is desired. 175 Watts. Tip diam., $\frac{1}{12}$ ". Ship. wt., $\frac{13}{4}$ lb. Equal to $\frac{2}{12}$ lb. old style copper each \$8.25



No. P-200—For medium tinware, cans, auto repairs, light roofing, sheet metal, etc. 200 Watts. Tip diam., %". Ship wt., 21/8 lb. Equal to 2 %-lb. old style copper.....each \$9.50

No. P-250—Same as No. P-200, except where greater speed is required for manufacturing. 250 Watts. Tip diam., %". Ship, wt., quired for manufacturing. 250 Watts. 2 1/4 lb. Equal to 3-lb. old style copper. ". Ship. wt., each \$10.75



auto, roofing, refriger-No. P-300-For heavy tinware, large cans. auto, roofing ator work, etc. 200 Watts. Tip diam., 78". Ship. wt., 278 4-lb. old style copper each \$12.50

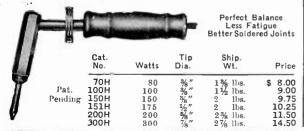


No. P-550—For auto radiators, copper sinks, roofs, heavy armatures, large branders, etc. 550 Watts. Tip diam., 1 1/8". Ship. wt., 4 1/8 lb. Equal to 5-lb. old style copper......each \$15.00

SPECIFY VOLTAGE WHEN ORDERING

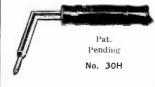
HEXACON HATCHET TYPE IRON

For same use as Plug Tip irons of equal wattage, shown above. Replaceable elements and all other features of Plug Tip Irons.



HEXACON FEATHERWEIGHT HATCHET IRON

So light its weight is hardly noticeable, but more powerful than most larger irons. Hatchet design makes iron effortless to use. No transformer or other cumbersome and expensive equipment required.



List Price.....\$5.00 Weight: $5\frac{1}{2}$ ozs. (less cord). *Watts: 40, 50 or 60. Both 1/8" and 1/4" dia. tips furnished with each iron. Shipping weight: 1 lb.

*Specify watts when ordering,



SOLDERMASTER Royal Blue Line ELECTRIC SOLDERING IRONS



GENERAL INFORMATION—Replaceable elements. Best grade of Madagascar mica for insulation. No. 55 has brass-sheathed cartridge element. Best grade nickel-chrome resistance wire. Replaceable hard drawn copper tips. All one piece swaged cases

CHROME PLATED. Equipped with 6 ft. Underwriters' Approved heater cord, rubber plug. Continental or English type plug 25c extra list. Stand for resting iron furnished.

VOLTAGES 110/120 220/250 A.C. or D.C., ANY CYCLE SPECIFY VOLTAGE WHEN ORDERING

SCREW TIP IRONS



No. 558—For light soldering, radio apparatus, etc. 55 Watts. Tip diam., 76". Ship. wt., 13 oz....each \$2.50





No. 100B—Same as No. 76B except used where more speed is required and heavier work is done. For home use. 90 Watts. Tip diam., 1/2" Ship, wt., 16 oz.....



-Ideal size for garage and repair work. For home use.each \$7.00 Watts. Tip diam., 78". Ship. wt., 24 oz..



No. 3008—For heavy steel metal, auto radiators, etc. 275 Watts. Tip diam., 1 1/4". Ship. wt., 38 oz.....each \$10.00

PLUG TIP IRONS



No. 71B-For light work, radio repairs, etc. 75 Watts. Tip each \$4.00 Ship. wt., 16 oz.....



Ship, wt., 18 oz.....



No. 1218—High speed iron for radio and electrical repairs. 125 Watts Tip diam., %". Ship. wt., 1¾ lbs....each \$5.50 each \$5.50



-For same work as No 150B, except where plug tip is de-Watts. Tip diam., 5%". Ship, wt., 34 oz.....each \$8.00 200 Watts.



018—For same work as No. 300B, except where plug tip is de-300 Watts. Tip diam., %". Ship. wt., 46 oz.....each \$10.00

DISPLAYS

Increase your sales with these silent salesmen. 1rons securely mounted, but readily removable for sale. Individually packed in cartons ready for shipment. Catalog number and wattage shown on front of display. Complete catalog information and price list on back.

SCROLL TYPE DISPLAY

Striking, Modernistic, All Metal Panel



No. 1 DISPLAY Illustrated Size 15" x 171/2" (Nos. 1B, 2B, and 3B also same size) This Display Panel Also Furnished With Five or Seven Irons (See Below)

List Price No. 1B—Nine Iron with Nos. 55B, 76B, 100B, 150B, 300B, 71B, 101B, 201B, 301B.... 20 lbs. \$54.50 No. 2B—Seven Iron with Nos. 55B, 76B, 100B, 150B, 300B, 71B, 101B 17 lbs 36.50 No. 3B—Five Iron with Nos. 55B, 76B, 100B, 150B, 300B. 28,00 15 lbs. No. 4B—Five Iron with Nos. 71B, 101B, 121B, 201B, 301B. 16 lbs. 32.00

ATTRACTIVE THREE COLOR CARDBOARD DISPLAY

This same display card also furnished with No. 5B and No. 5DB, but mounted with irons listed below.

No. 6B DISPLAY Illustrated

Size 12" x 161/2" (Nos. 5B, 5DB also same size)



No. 5B—Three Iron with Nos. 55B, 76B, 100B	Ship. Wt. 4 lbs.	List Price \$11.00
No. 5DB-Three Iron with Nos. 55B, 100B, 150B		
on display and 2 No. 55B and 1 No. 100B		
for stock	8 lbs.	23.50
No. 6B-Three Iron with Nos. 71B, 101B, 121B	5 lbs.	14.00

KWIKHEAT SOLDERING IRONS

THERMOSTATICALLY CONTROLLED

110/₁₂₀ V. A.C. **HOT IN 90 SECONDS - 225** WATTS



- New Bevelled Tips give 30% more heat
- Three times faster heating
- Maintains constant temperature
- Tips stay tinned 10 times longer
- Cannot overheat
- Temperatures are pre-set

Self-Contained Thermostat Patented Feature

KWIKHEAT Thermostatically Controlled Soldering fron is the only iron containing a built-in thermostat. This enables it to heat up ready for use in 90 seconds! Fully guaranteed! KWIKHEAT's patented thermostat maintains perfect temperature for best soldering . . . prevents overheating . . . prolongs life of iron . . . reduces cost of tip maintenance. Cool plastic handle . . . light weight . . . 6 interchangeable tip styles make one KWIKHEAT equivalent to several soldering irons of different voltage.

LIST PRICE \$1100

SPECIFICATIONS

Type #300:

225 Watts - 100/125 V. A.C. Weight of iron with # tip: $13\frac{1}{2}$ ozs. Length of iron with tip: 131/4 inches Length of cord: 6 feet

Core made of tellurium copper alloy Tips: \$1.25 each Set of 5: \$5.50

ABLE TIP STYLES Each \$1.25













MEDIUM

MEDILIM

MED IT

HEAVY

* UNGAR Electric 700l Co., Inc.

LOS ANGELES 54

Manufacturers of

Ungar Electric Soldering Pencils



WELLER SOLDERING GUNS

FOR ALL YOUR SOLDERING



Fast 5 second heat comes on the instant trigger is pulled. No wasted time or current. No need to unplug gun between jobs.

TRIGGER ACTION

Just pull the trigger switch...model S-107 has single heat 100 watts; model D-207 offers dual heat with two switch positions 100 and 135 watts.

FLEXIBLE TIPS

Flexible tips can be easily formed to slip through chassis wiring; handles difficult, deep corner jobs with ease.

PREFOCUSED SPOTLIGHT

Built-in Solderlite eliminates blind soldering—locates the work quickly and shows you exactly what you are doing.

TWO TYPE WELLER TIPS



Duratip is standard for models S-107 and D-207—chisel shape provides more soldering area, maximum soldering efficiency. Pkg. of 2 for 25c.

Long Life Tip—loop tip, highly efficient at less cost. Package of 4 for 25c.



Model WD-250 has 200 watts normal heat on first switch position, and 250 watts instant heat on second trigger position. Model WS-200 provides 200 watts single heat.

5 SECOND HEAT

Pull the trigger switch, and solder. Fast 5 second heating eliminates waiting. Heat goes off automatically when trigger is released . . . no wasted time or current, no need to unplug gun between jobs.

NEW DESIGN

Streamlined design gives perfect balance and soldering ease. Improved transformer engineering provides light weight, compact unit with increased capacity and efficiency. 'Over and under' terminal positions assure maximum visibility with built-in spotlight.

LONGER REACH

Greater $5\frac{1}{4}$ " length reaches into remote spots with ease.

RIGID-TIP



New, improved tip is standard with models WS-200 and WD-250. Chisel-shape tip has more copper and greater surface for faster heat transfer, and design provides bracing action for heavier soldering. Package of 2 for 35c.

UNDERWRITERS' LABORATORIES APPROVED

Weller Guns S-107 and D-207 are U.L. approved. Also approved in Canada under CSA App. No. 7508.



new Weller handy guide to faster, easier soldering—20 pages fully illustrated. Price 10c.



MODEL	WATTS	CYCLES	VOLTS	LENGTH*	NET PRICE		
S-107	single heat 100	60	115	4 ^H	\$11.95		
WS-200	single heat 200	60	115	51/4"	12.95		
D-207	dual heat 100/1 35	60	115	4"	13.95		
WD-250	dual heat 200/250	60	115	51/4"	14.95		

*Length-dimension from front of housing to tip.

U.S. Pat. No. 2405866, Other Pat. Pending.

Printed in U.S.A.

KESTER FLUX-CORE SOLDER

Standard for the Radio and TV Field



- Kester Plastic Rosin-Core Solder
- Kester "Resin-Five" Core Solder
- Kester Radio Solder
- Kester Acid-Core Solder
- Kester "A" Flux-Core Solder
- Kester Nosput Flux-Core Solder
- Kester Knorust Flux-Core Solder
- Specialized Flux-Core Solders
- Solid Wire and Bar Solders
- Kester Preforms, Rings, Pellets, Washers, Ribbon
- External Rosin Soldering Fluxes
- Other Fluxes
- Kester Soldering Iron Brackets

FOR PEAK SOLDERING EFFICIENCY, IT'S KESTER! Kester offers every conceivable type of Solder product. Strand sizes as small as .008" diameter in Flux-Core Solder, unusual alloys and varying Flux contents or Core sizes.

A COMPLETE TECHNICAL SERVICE. If you're not getting peak efficiency or have a specific problem in your soldering operations, take advantage of the facilities of Kester's Technical Department. . . . It costs you nothing.

STANDARD FOR INDUSTRY
SINCE 1899



KESTER SOLDER COMPANY

4201 Wrightwood Ave., Chicago 39, Illinois

Factories Also At Newark, New Jersey • Brantford, Canada



he choice of skilled mechanics



"GRIPTITE" COMBINATION PLIERS

The finest quality combination pliers. Designed for heavy duty. Slightly tapered nose, sharp deep milled teeth and grooved jaws for gripping cotter pins and wire. Knurled handles. The 8" and 10" sizes have three slip joint adjustments which give a wide range of parallel grips.

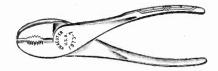
							Price
No.	Len	gth	Fi	nish	Wt. pe	r doz.	Each
356	51/2	in.	Full	Nickel	31/2	lbs.	\$1.50
356	6	in.	Full	Nickel	51/4	lbs.	1.60
356	8	in.	Full	Nickel	83/4	lbs.	2.00
356	10	in.	Full	Nickel	14	lbs.	2.50



THIN NOSE COMBINATION PLIERS

The tapered jaws and thin nose of these pliers enable the mechanic to grip objects difficult to reach in tight, narrow working spaces. Knurled handles, milled gripping teeth and wire cutters.

						Price
No.	Ler	igth	Finis	h	Wt. per doz.	Each
40	5	in.	Nickel	Plated	21/4 lbs.	\$
40	6	in.	Nickel	Plated	41/4 lbs.	\$1.25



MECHANICS' SIDE CUTTING PLIERS

Gripping pliers with side cutters. Tapered nose, milled teeth and grooved jaws for gripping cotter pins and wire. Knurled handles. The cutters are very handy for light wire work.

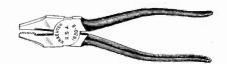
				Price
No.	Length	Finish	Wt. per doz.	Each
1973	5½ in.	Full Nickel	3½ lbs.	\$2.20
1973	7 in.	Full_nickel	71/4 lbs.	2.50



LINEMEN'S SIDE CUTTING PLIERS

Designed for heavy work to meet the requirements of linemen. Drop forged from selected plier steel, skilfully hardened and tempered. Powerful wire cutters, a well balanced head and deep milled gripping jaw surface for holding and bending wire.

				Price
No.	Length	Finish	Wt. per doz.	Each
1801	6 in.	Blue Temper	51/4 lbs.	\$2.45
1801	7 in.	Blue Temper	7½ lbs.	2.75
1801	8½ in.	Blue Temper	11¼ lbs.	3.75



ELECTRICIANS' SIDE CUTTING PLIERS

Used extensively in electric wiring of fixtures, appliances and other general repair work.

Very popular with mechanics on production work where electric wiring is required in the finished product.

				Price
No.	Length	Finish	Wt. per doz.	Each
1830	4 in.	Blue Temper	$1\frac{1}{2}$ lbs.	\$1.75
1830 -	5 in.	Blue Temper	21/4 lbs	1.90
1830	6½ in.	Blue Temper	43/4 lbs.	2.10
1830	7 in.	Blue Temper	63/4 lbs.	2.35
1830	8 in.	Blue Temper	81/4 lbs.	2.75



IGNITION PLIERS

Very narrow head, serrated gripping teeth and well shaped handle grips. Three slip joint positions. Generally used on distributor, generator, magneto and carburetor work.

l					Price
l	No.	Length	Finish	Wt. per doz	Each
ļ	643	5 in.	Blue Temper	1 lb.	\$1.60

THIS IS ONLY A PARTIAL LISTING OF KRAEUTER TOOLS

SEND FOR CATALOG



KRAEUTER

The choice of skilled mechanics



SHORT CHAIN NEEDLE NOSE PLIERS

Short tapered jaws for bending and looping wire. The short nose gives these pliers extra leverage and gripping strength. Used for wiring switches and other open electric work.

				Price
No.	Length	Finish	Wt. per doz.	Each
1641	5 in.	Blue Temper	2¾ lbs.	\$2.00
1643	Same w	ithout Cutter	$2\frac{3}{4}$ lbs.	1.75



LONG CHAIN NEEDLE NOSE PLIERS

Long tapered jaws and needle nose. Used extensively in all industries . . . from switchboard, electric fixture and appliance wiring . . . to motor ignition, aviation and general manufacturing work.

				Price
No.	Length	Finish	Wt. per doz.	Each
1661	6 in.	Blue Temper	3½ lbs.	\$2.30
1671	Same wit	hout Cutter	$3\frac{1}{2}$ lbs.	1.80



EXTRA LONG CHAIN NOSE PLIERS

Extra long tapered jaws with narrow pointed nose. Used extensively in automotive . . . electric . . . aviation and general production and repair work.

Length of jaw 2% in.

				Price
No.	Length	Finish	Wt. per doz.	Each
1781	7 in.	Blue Temper	3¾ lbs.	\$2.65
1771	Same	without Cutter	3¾ lbs.	2.15

U-14



LONG FLAT NOSE PLIERS

Adaptable to many uses where a tool with long flat sturdy jaws is required. Jaws are scored to give a good gripping and holding surface.

Price

No.	Length	Finish	Wt. p	er doz.	Each
1751	6 in.	Blue Temper	3	lbs.	\$2.40
1741	Same wit	hout Cutter	3	lbs.	1.90



LONG NEEDLE OR SNIPE NOSE PLIERS

Especially designed for difficult and awkward jobs where no other tool will serve. The long slender jaws make it adaptable to many uses. A very popular plier for fine work.

 $2\frac{3}{32}$ in. Jaw

Price

No.	Length	Finish	Wt. per doz.	Each
1621	6 in.	Blue Temper	21/4 lbs.	\$2.10



CURVED NEEDLE OR SNIPE NOSE PLIERS

To reach that place down in under or around an obstruction. Very useful where greater visibility is required in holding small objects at an angle.

Price

No.	Length	Finish	Wt. per doz.	Each
1631	$5\frac{1}{2}$ in.	Blue Temper	$2\frac{1}{4}$ lbs.	\$2.35

THIS IS ONLY A PARTIAL LISTING OF KRAEUTER TOOLS

SEND FOR CATALOG



KRAEUTER

The choice of skilled mechanics



DIAGONAL "OBLIQUE" CUTTING PLIERS

Made especially for close cutting. Used extensively in electrical work, radio manufacturing, telephone and automotive ignition work.

					Price
No.	Size	I	inish	Wt. per doz.	Each
4501	4½ in	. Blue	Temper	$1\frac{1}{2}$ lbs.	\$1.80
	5 in	. "	66	$2\frac{3}{4}$ ibs.	2.05
	6 in	. "	6.6	3¾ lbs.	2.35



SHORT NOSE DIAGONAL CUTTING PLIERS

An excellent cotter pin tool. Specially designed with short nose. Very popular with aviation and automotive mechanics

				Price
No.	Size	Finish	Wt. per. doz.	Each
3601	6	Blue Temper	41% lbs	\$2.50



"HIGH POWER" DIAGONAL CUTTING PLIERS

This type diagonal plier has the joint very close to the end of the cutter to give added leverage which makes cutting easy. A well balanced tool adaptable to the work in many trades.

				Price
No.	Length	Finish	Wt. per doz.	Each
4610	7 i n	Blue Temper	5¾ lbs.	\$2.30



WIRE STRIPPING DIAGONAL CUTTING PLIERS

Narrow head and notched cutters for stripping fine wire .062 diameter. The spring in the handle makes this a very fast cutting tool. Used by manufacturers of electric fixtures, appliances, radio and radio tubes.

				Price
No.	Length	Finish	Wt. per doz.	Each
2612	6½ in.	Blue Temper	3 lbs.	\$2.85



No. 1850

END CUTTING NIPPERS

Powerful end nippers carefully edged to insure sharp enduring cutters. Compact jaws and close riveted joint.

1.1				Price
No.	Length	Finish	Wt. per doz.	Each
1850	5 in.	Blue Temper	4½ lbs.	\$2.00
1850	6 in.	Blue Temper	6 lbs.	2.25
1850	7 in.	Blue Temper	8 lbs.	2.50
1850	8 in.	Blue Temper	10½ lbs.	2.90

NOTE: These pages contain only a partial listing of KRAEUTER Tools. Ask for complete catalog describing the entire extensive KRAEUTER line.

All prices subject to change without notice.



HARD WIRE DIAGONAL CUTTING PLIERS

Designed and edged for the purpose of cutting hard wire . . . in small sizes not larger than 16" diameter . . . not intended for cutting soft wire.

No.	Length	Finish	W/t non de-	Price
		Fillian	Wt. per doz.	Each
4206	6 in.	Blue Temper	4½ lbs.	\$2.50

THIS IS ONLY A PARTIAL LISTING OF KRAEUTER TOOLS

SEND FOR CATALOG

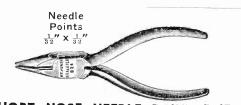


Professional Line

SPECIAL NEEDLE POINT PLIERS

Designed for light fine professional work. The special needle points of these pliers make them invaluable where delicate adjustments have to be made.

(NOSE OF THESE PLIERS NOT GUARANTEED)



SHORT NOSE NEEDLE POINT PLIERS

Price No. Length Finish Wt. per.doz. Each 824 4½ in. Full Polished 1½ lbs. \$2.50 834 Same without cutter 2.20 Needle Points X 1/32

MEDIUM NOSE NEEDLE POINT PLIERS

Price No. Length Finish Wt. per.doz. Each 825 5 in. Full Polished 21/4 lbs. \$2.50 835 Same without cutter 2 25 Needle **Points** $\frac{1}{2}$ " $\times \frac{1}{32}$ "

LONG NOSE NEEDLE POINT PLIERS

Price No. Length Finish Wt. per.doz. Each 826 6 in. Full Polished 3 lbs. \$2.70 836 Same without cutter 2.35 Needle **Points** 132" X 11

EXTRA LONG NOSE NEEDLE POINT PLIERS

				Price
No.	Length	Finish	Wt. per.doz.	Each
827	7 in.	Full Polished	3¾ lbs.	\$3.00
837	Same	without cutter	33/ 1hc	2 75



NEEDLE POINT DIAGONAL CUTTING PLIERS

Price

No. Length Finish Wt.per.doz. Each 5612 6½ in. Full Polished 3 lbs. \$3.30 (With Stripping Notch)



OVAL HEAD DIAGONAL CUTTING PLIERS

Price

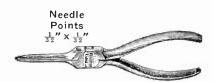
No. Length Finish Wt. per.doz. Each 5611 5 in Full Polished 2 1/4 lbs. \$2.75



NEEDLE POINT DIAGONAL CUTTING PLIERS

Price

No.	Length	Finish	Wt. per.doz.	Each
5601	4½ in.	Full Polished	2 lbs.	\$2.50
5601	5 in.	Full Polished	2 ^{24 lbs} .	2.70
5601	6 in.	Full Polished	3) lbs.	3.10



NEEDLE POINT SNIPE NOSE PLIERS

Price

No. Length Finish Wt. per.doz. Each 842 6 in. Full Polished 214 lbs. \$2.50





No. 41 • Electricians' Diagonal Pliers-

Hardened and tempered in oil. Special narrow nose for radio and electrical work.

......4 inches, 5 inches and 6 inches Can be furnished with insulation stripper.



No. 654 • Utica Long Needle Nose Side Cutting Plier

This is a long, fine, spring-tempered nose side cutting plier, drop forged and with hand-honed cutting knives.



No. 1033 • Utica Long Chain **Needle Nose Plier**

This is a long needle nose type of plier without α side cutter. It has a spring-tempered needle nose with a fine balance for delicate work.



No. 622 • Utica Short Chain Nose Mechanic's Plier

This plier is a Short Chain Nose Side Cutting Plier, hand-honed cutting knives. It makes an all around Electrical Mechanic's plier.

No. 445—Special Diagonal Pliers with Spring



A slim nose cutting plier designed especially for radio and electrical work. Extra fine hand honed edges permit nearly flush cuts.

Útica Finish Size....

5 inches and 6 inches



No. 50 • Utica Standard Side Cutting Plier

An ideal tool for electrical work. Drop forged and skillfully tempered. Its cutting qualities are unsurpassed by any side cutting plier.

Utica Finish Size 5, 6, 7, 8 inches



No. 777 • Utica Long Needle **Nose Plier**

This plier has a long, half-round, spring-tempered nose for very fine work in assembling small electrical apparatus.



No. 888 • Curved Needle Nose Pliers-

This is a long curved spring-tempered Needle Nose Pleir for use in deep and narrow places. It may be used without turning or twisting the hand in the assembling of small fixtures, electrical apparatus,

for-More-



TOOL MILEAGE



No. 22 • Utica Chain Nose Plier

This is a Short Chain Nose Plier forged from a fine quality of steel with fine points particularly adapted for the use of Jewelers, Opticians, Telephone Installers, Electricians and Radio Assemblers.

Utica Finish Size4, 41/2, 5, 6 inches



No. 82 • Utica Chain Nose Wiring Plier

This is a special Radio Repair man's plier, new in design, having a chain nose for those who prefer this type of construction.

Utica Finish Size 8 inches



No. 46 • Midget Diagonal Plier



No. 91 • Thin Adjustable 221/2° Angle Wrenches, Alloy Steel

Both the handle and jaw are drop forged from a high grade **Alloy Steel**, hardened and tempered in oil. Will not break or wear in the gear teeth and allow play in the wrench, permitting the jaw to slip off the nut.

It will give better service and last longer than any other wrench.

Size 4, 6, 8, 10, 12 inch



No. 895 Utica Radio Plier

This is a General Radio Repair Man's Plier. It has a center cutter and flat scored nose for looping and bending.



No. 517 Utica Ignition Plier

This ignition Plier with its unique design will fit all ignition units, spring tempered. A great little tool for the hard to get at adjustments.

No. 517 5 inches



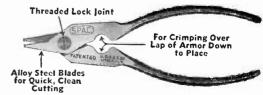
No. 65 ● Utica Jeweler's End Cutting Nipper

This Nipper is forged from a fine grade of steel, carefully tempered. A light, strong End Cutting Nipper, used by Electricians and Machinists. The keen cutting edges and "Perfect Fit" handles make this a very popular tool.

Utica Finish Size.......4½ and 5 inches

No. 100BX • Utica-Smith Pocket Armor Cutters

No. 100BX—Utica-Smith Pocket Armor Cutters 7"
Alloy Steel



The easiest, quickest tool made for cutting armored cable. Fully illustrated instructions packed with each tool.

2uality



Tools

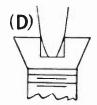
Creators of

SHOCK-PROOF BREAK-PROOF AMBER PLASTIC HANDLE SCREWD

TIP is properly ground and gauged to fit screw slot accurately. Ground on a flat belt grinder with grain running lengthwise with

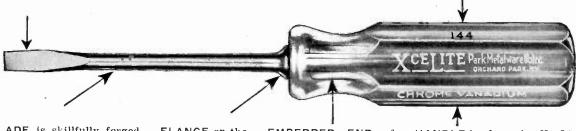
the blade "B" eliminates the indentations of crosswise grinding, always sources of tip weakness and breakage "A". XceLite grinding insures uniformity right down to the edge





of the tip; insuring perfect fit in the screw slot. Note illustration "C" showing perfect rectangle of XceLite Tip, insuring grip in screw slot. Illustration "D" shows "dubbed-off" result of ordinary grinding with the tendency to lift out of the screw under (B) turning pressure.

SIZE is clearly marked on the handle. Easier to select the correct size easier to reorder. Number on handle is catalog number, also it gives size of screwdriver. For example: No. 144 means ¼" diameter blade; 4" long. Letters
"R" or "S" signify round or square blade.



BLADE is skillfully forged of SAE 6150 Chorme Vanadium Electric Furnace Steel. Polished Blades.

FLANGE on the blade of handle resists shock of pounding.

EMBEDDED END of blade, winged design, prevents turning of the blade in the handle.

HANDLE is of genuine XceLite plastic, full size and correctly shaped for grip and balance,

XCELITE SHOCKLESS SCREWDRIVERS Complete XceLite Screwdriver Price List

Square Blades

	Stu	bbies			1
††S-71612 ††S-71618 ††S-3818 S-1424	16"x12" 16"x18" 16"x18" 38"x18" 14"x24"	2.35 2.60 2.50 2.25	1 ½ lb.	in	
††\$-3812 ††\$-7166	3/8 "x12" 15"x 6"	$\frac{2.25}{1.80}$	1 ¼ lb. 1 ¼ lb.	1	
S-388	3/8"x 8"	$\frac{1.40}{1.60}$	4 34 lb. 6 lb,		
S-5168 S-51610	5"x 8" 5"x 10"	1.30	4 1/4 lb.		
S-5166	₹6″x 6″	1.20	3 34 1b.		
S-5162	1/4 "x 8" 18"x 2"	1.10	3 lb. 2 lb.		
S-146 S-148	¼ "x 6"	1.00	2 1/2 lb.		
S-144	1/4 "x 4"	.95	2 lb.		
S-142	18"x10" 14"x 2"	1.05	2 ¼ lb. 1 ¾ lb.		
S-3168 S-31610	3"x 8"	.95	2 lb.		
S-3166	1 ³ g"x 6"	.90	2 lb.		
S-3164	16 X 4"	.80	1 ¾ lb. 1 ¾ lb.		
S-3163	1/8"x 5" 1/6"x 3"	.60 .75	½ lb.		
†SH-184 †SH-185	1/8" x 4"	.60	½ lb.		
†SH-183	1/8 "X 3"	.60	½ lb.		
S-185	⁷⁸	.45 .45	½ lb. ½ lb.		
S-183 S-184	1/8 "x 3" 1/8 "x 4"	\$.45	½ lb.		
Number	Size Blade	List	Box of 10		
** Y			Weight		2

.55

.65

Large double-grip handles.

†Screwholding type used on SH-10 Display.

Round Blades

			Weight	
Number	Size Blade	List	Box of 10	
*R-3322	32"X 2" 32"X 3"	\$.30	¹⁄₂ lb.)	4 ea.
*R-3323	3" x 3"	.30	1/2 lh. }	on 332
*R-3324	32"x 4"	.30	½ lb.	Display
**R-181	1/8"x 2"	.30	½ lb.)	4 ea.
*R-183	⅓″x 3″	.30	½ lb. }	used on
*R-1841/2	1/8 "x 4"	.30	½ lb.	#12 Dis
††R-184	⅓8″x 4″	.50	⅓ lh.	play
††R-186	1/a"x 6"	.55	34 lb.	
††R-188	¼ ″x 8″	.60	1 lb.	
††R-1810	1/8 "x 10"	.65	1 lb.	
R-5323	-2°″x 3″	.60	1 lb. γ	3 ea.
R-5324	5 "x 4"	.60	1 lb. >	on #10
R-5325	5 "x 5"	.60	1 lb.]	Display
R-5328	57 x 8"	.70	1 1/4 lb.	
R-3163	18"x 3"	.70	1 ½ lb.	
R-3164	3"X 4"	.75	1 ½ lb.	
R-3166	3"x 6"	.85	1 3/4 lb.	
R-3168	3"x 8"	.90	1 ¾ lb.	
R-31610	3"x10"	1.00	2 lb.	
R-31618	18"x18"	1.75	(pk. 1)	
R-144	1/4 "x 4"	.90	2 lb.	
R-146	1/4 "x 6"	.95	2 ¼ lb.	
R-148	1/4 "x 8"	1.05	2 ½ lb.	
R-5166	5"x 6"	1.15	3 ½ lb.	
R-5168	5 ″x 8″	1.25	4 lb,	
##04 of this my	401	J: 1		

**24 of this number used on #24 display.

*These numbers have ½" dia. handles. For insulated blades any size in round list add 25 cents to list price.

There's an XceLite Screwdriver "sized" to fit every job.

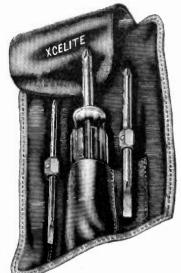
Note: We have standardized our packages on the decimal system instead of in dozens, in accordance with Government practice. All screwdrivers and nut drivers will be packed ten in a box, except where otherwise noted (exceptions are large sizes or slow moving items). Weights given above are correct to the nearest quarter-pound limit. items). Wei

\$-3161

\$-141 S-5161



DUAL-PURPOSE SCREWDRIVERS



IN ROLL KIT

\ \(\(\(\(\(\) \)

No. CK-3....\$3.95 List Contains RB-1, RB-20 RB3 and Combination Handle.

No. CK-2...\$3.10 List Contains RB-1, RB-2 and Combination Handle.

See Below for Individual Listing of Blade Sizes.

IN PLASTIC BOX

No. BC22 Containing	RB1,	RB2 and Reg.	Handle\$3.10
No. BC23 Containing	RBI,	RB2, RB3 and	Reg. Handle 3.95

OR INDIVIDUALLY



BLADE COMBINATIONS

(Please Order by Number)

No. 1—No. 1 Phillips and 3" XceLite No. 2—No. 2 Phillips and 4" XceLite No. 3—No. 3 Phillips and 16" XceLite

COMPLETE **BLADES ONLY** (Regular Type) (Regular Type) List List Price Price \$0.90 No. CR1 No. CR2 No. CR3 No. RB1 No. RB2 \$1.60 1.60 No. RB3

HANDLES ONLY

List Price No. 25 Regular.....



BLADES ONLY

COMPLETE

(Stubby Type)
No. CS1 (Stubby Type) No. SB1 No. SB2 \$0.65

HANDLES ONLY

No. 26 Stubby \$0.65

DETACHABLE REAMERS



No. 61 \$1.35 List 1/8" - 5"



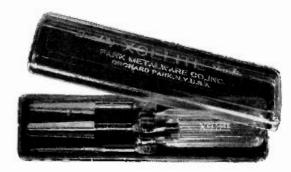
No. 62 \$1.65 List 1/4" - 1/2"



No. 63...\$1.95 List 16" - 11"

Detachable to fit your XceLite No. 14 Nut Driver or "Combination-Detachable" Screwdriver! Short enough to get in where ordinary reamers can't! Enlarge holes in plastic, sheet metal, wood!

REAMER SETS IN BOX



No. BR32 Contains Reg. Handle, No. 61 and 62 Reamers......\$4.25 No. BR33 Contains Reg. Handle, No. 61, 62 and 63 Reamers 5.95

REAMERS IN PLASTIC ROLL KIT

XceLite-la ... inisX = Diameter List Length No Point Size Blade Blade Weight Price 3 " 16 3 " X-108 6''2 lbs. \$1.05 1 3" .95 X-101 11/4 lbs. 4" 1/4 " X-102 2 lbs. 1.25 2 6" 3 X-103 lbs. 1.65 X-104 lbs. 2.05 SHORT STUBBY TYPE % lb. SX-101 .90 2 lbs. SX-102 1.00



XCELITE Clutch Head Screwdrivers

Type G	Type A	Size	Diameter Blade	Length Blade	List Price Each
G-183	A-183	1/8"	16"	3"	\$1.10
G-5324	A-5324	32"	1/4 "	4"	1.20
G-3164	A-3164	3 " 16	1/4 "	4"	1.20
G-146	A-146	1/4 "	5 "	6"	1.60
G-5166	A-5166	5 "	3/8 "	6"	1.95

Note: Both above types are the same size and the same price. Order by Number.

Quality 2



REG. TRADE MARK

XCELITE PLIERS

XceLite Pliers are fully guaranteed against defects of material and workmanship. Any plier showing such defects will be willingly replaced if returned to us.



No. 51 — XceLite Long Needle Nose and Side Cutter PLIERS, 7"\$2.80	
No. 52 — XceLite Long Needle Nose PLIERS (Without Side Cutters)	
List Price	
This plier is identical with the above except it	
does not have the side cutters \$2.40	

List Price No. 54 - XceLite Diagonal PLIER, 4"



No. 55 - XceLite Diagonal PLIER, 5"

List Price \$2.60

\$2.60



List Price

No. 57 - XceLite Extra Long Duck Bill PLIER, \$2.70



List Price

No. 59 - XceLite Chain Nose Electrician's PLIER, 73/4".....\$3.10



No. 60 - XceLite Side Cutting PLIER, 6"...

List Price

XCELITE NUT DRIVERS

6" Overall Length

		=	Chrome
Number	Size	Polished	Plated
6	3 " 16	\$0.75	\$0.85
7	32"	.75	.85
8	1/4"	.75	.85
9	3 2 "	.75	.85
10	16"	.75	.85
11	11/32"	.75	.85
12	3/8 "	.75	.85
14	7 " 16	1.15	
16	1/2"	1.15	

9" Overall Length

Number	Size	List
A -6	3 "	\$0.95
A -7	32"	.95
A -8	1/4"	.95
A-9	32"	.95
A-10	16"	.95
A-11	$\frac{1}{3}\frac{1}{2}''$.95
A-12	3/8 "	.95
A-1 4	7 "	1.15
A-16	1/2"	1.15

3 74	Overall Feu	gın
Number	Nut Size	List
S-8	1/4 "	\$0.70
S-10	18"	.70
S-12	3/8 "	.70



HOLLOW SHAFT NUT DRIVERS



No. and Length Overall	Nut Size	Depth of Hole	Weight per Box	List	Insulated List
HS-10 6" HS-11 6" HS-12 6" HS-14 7"	5/6" 111" 312" 8/8"	5" 5" 5"	1 lbs. 1 lbs. 1 lbs. 114 lbs.	\$1.05 1.05 1.05 1.20	\$1.30 1.30 1.30 1.45
HS-16 7" HS-18 7" HS-20 7"	1/2" 9/6" 5 8"	5" 5" 5"	1½ lbs. 1½ lbs. 18/8 lbs. 1/8 lbs.	1.25 1.30 1.50	1.45 1.50 1.55 1.75

XCELITE NO. 3 De Lux



RADIO AND **ELECTRICAL** KIT

Set includes: R-142, R-3163, R-5166, R-184, R-144, X-101 and R-3166.

> No. 3 \$6.95 No. 3C Chrome ...\$6.95 Plated \$7.65

NO. 4 ALL PURPOSE KIT

Kit same as shown above. Set includes: S-142, S-144, X-102, S-184, S-3166, S-5166 and S-388, No. 4 Polished \$8.60 No. 4C Chrome \$9.35

Quality |



Tools

REG. TRADE MARK

NO. 17 NUT DRIVER SET

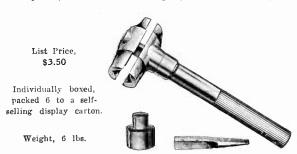
Amber Handles - Highly Polished Blades



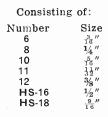
Consisting	of:
Number	Size
6	16"
7	32"
8	1/4 "
9	32"
10	16"
11	35"
12	3/8"
Complete v Rack \$	with 55.75

6" XCEL Adjustable SOCKET WRENCH (with Attachments)

A whole set of tools in one! Fits any size nut, hexagon or square, round or odd shaped, from $\frac{1}{8}$ " to 1".



NO. 137 NUT DRIVER SET With Colored Handles



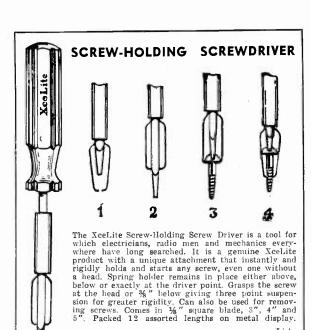


No. 137 Polished Finished	7.40
No. 137C Chrome Plated	8.15

No. 117 SET With Colored Handles

Set consists of Nos. 6, 7, 8, 9, 10, 11, and 12. Furnished in either full polished or chrome finish. Complete with same type stand as No. 137.

No. 117 Set Polish	ed Finish	\$6.45
No.117C Chrome	Plated	7.25



Display, complete\$6.35

Refills, each



Delux No. 127 NUT DRIVER SET

NEW LARGER HANDLES -- BRIGHTER COLORS

Makes Size Selection Easy.

Set consists of Nos. 6, 7, 8, 9, 10, 11, & 12. Furnished in either full polished or chrome finish.

 No. 127 Polished Finish
 \$6.50

 No. 127C Chrome Plated
 7.30

The metal container can be fastened to the wall or work bench by screws which are inaccessible when locked. Red Wrinkle finish.



.60

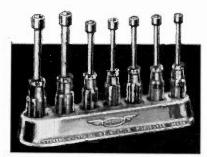
READY FOR QUICK WORK

THE ORIGINAL SPINTITE





SUPER DELUXE SPINTITES

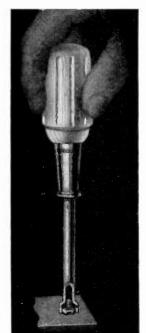


The wrench that works like a screwdriver! The super deluxe Spintite for panel or switchboard work - deep drilled with extra deep sockets. Beautifully plated and finished. A must for radio and electrical work.

Number	Size	Length	Drill Depth	List Price
3006	3	6"	1 3/4	\$1.10
3007	372	6"	21/4	1.10
3008	1/4	6"	21/4	1.10
3009	32	6"	21/4	1.10
3010	1 ⁵ e	6"	2 1/4	1.10
3011	$\frac{1}{3}\frac{1}{2}$	6"	21/4	1.10
3012	3/8	65%"	51/8	1.10
3014	176	65/8"	51/8	1.35
3016	1/2	65/8"	51/8	1.35
3018	916	65%"	51/8	2.45



REGULAR SPINTITES THE ORIGINAL SPINTITE WRENCH



Works like a screwdriver-features cold forged sockets, drilled shanks, special tool steel, hardened and tempered, ferrules and shanks are bright plated and the hardwood handles have natural rubbed finish.

Number	Size	Length	Nut Size	List Price
3406	3	6"	2 & 3	\$0.70
3407	$\frac{\frac{3}{16}}{\frac{7}{32}}$	6"		.70
3408	1/4	6"	4	.70
3409	9 3 2	6"		.70
3410	5 1 G	6"	5 & 6	.70
3411	1.1	6"	8	.70
3412	3/8	6"	10	.70
3414	7	71/8"	12 & 1/4	1.00
3416	i_2	71/8"	',-	1.00
3418	9	71/8"	35 <u>0</u>	1.75
3420	16 5/8	71/8"	3/8	1.75

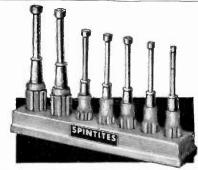
T-73 SET

Set of popular sizes in wood stand.

CONTENTS

3406	3412
3408	3414
3410	3416
3411	Wood Stand

List Price \$6.50





SPINTITE

(TRADE MARK REGISTERED)

WRENCHES

DELUXE SPINTITES

For the mechanic who appreciates fine tools we offer these shining Spintites with transparent shockproof handles.

Number	Size	Length	Nut Size	List Price
3906	3 16	6"	2 & 3	\$1.00
3907	16	6"		1.00
3908	32	6"	4	1.00
3909	7 4. 9	6"	_	1.00
3910	$\frac{\frac{9}{32}}{\frac{5}{16}}$	6"	5 & 6	1.00
3911		6"	8	1.00
3911 3912	$\frac{1}{3}\frac{1}{2}$ $\frac{3}{8}$	6"	10	1.00
3914	τ	71/8"	12 & 1/4	1.25
3916	16 14	71/8"	22 00 /4	1.25
3918	1/2 9	71/8"	5_	2.10
3920	16 5/8	71/8"	16 3/8	2.10



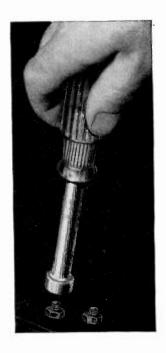
T-8 SET

Just right for a place on the mechanic's bench. Seven popular sizes.

CONTENTS

3906	3912
3908	3914
3910	3916
3911	Wood Stand

List Price \$7.7



ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

JUMBO SPINTITES

A rugged special Spintite for use on all types of hardened or self tapping cap screws. Shanks and sockets are made of alloy tool steel with a very high degree of hardness. Plastic grip is oversize for greater leverage. Depth of broach is less than thickness of screw heads to prevent marring panels.

Number	Size	Length	Handle Size	List Price
3058	1/4	81/2"	11/8"	\$3.15
3059	9 32	81/2"	11/8"	3.15
3062	3%	81/2"	11/8"	3.15
3066	1/2	81/2"	11/8"	4.70
3068	$\frac{9}{16}$	81/2"	11/8"	4.70

EXTRA LONG SPINTITE



A special Spintite for those hard-to-get-at places. Medium sized, easily controlled plastic grip and extra long shaft made of chrome alloy steel. It belongs in the tool kit of every assembler and repairman.

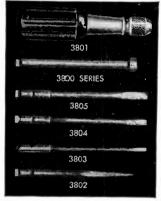
Size	Length	Drill Depth	List Price
1 ³ 6	10"	1½	\$1.75
3 ⁷ 2	10"	11/2	1.75
1/4	10"	$1\frac{1}{2}$	1.75
32	10"	$1\frac{1}{2}$	1.75
	10"	11/2	1.75
	10"	11/2	1.75
	10"	$1\frac{1}{2}$	1.75
	10"	11/2	2.75
	10"	11/2	2.75
. –	10"	$1\frac{1}{2}$	4.40
5/8	10"	11/2	4.95
	18 37 14 39 15 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

SPINTITE

(TRADE MARK REGISTERED)

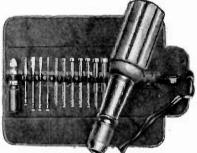
WRENCHES





CHUCK TYPE SPINTITES

Number	Description	Size	Length	Nut Size	List Price
3801	Universal Handle				\$1.55
3802	. Ream Awl	$\frac{1}{16}$ to $\frac{3}{16}$	4 5/8		.70
3803	Screwdriver	1/8 x 4	4 5/8		.70
3804	Screwdriver		4 5/8		.70
3805	Screwdriver	$\frac{3}{16}$ x 4 $\frac{1}{4}$ x 4	4 5/8		.70
3806	Spintite Shank	3	4_{16}^{7}	2 & 3	.50
3808	Spintite Shank	$\frac{\frac{3}{16}}{\frac{1}{4}}$	4 5/8	4	.50
3810	Spintite Shank	5 16	4 5/8	5 & 6	.50
3811	Spintite Shank	10	$4\frac{5}{8}$	8	.50
3812	Spintite Shank	32 3/8	4 5/8	10	.50
3814	Spintite Shank		4 3/4	12 & 1/4	.70
3816	Spintite Shank	$\frac{\frac{7}{16}}{1/2}$	4 3/4	00 /4	.70
3850	Screwdriver, Cross Point	No. 2	4 5/8		1.00
3852	Four way Neutralizing Tool	5	5		1.35

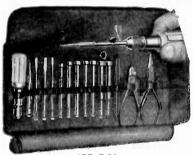


CONTENTS

	U	U	1.4	- 1		1.4	ı	5
3801	L			38	05			3811
3802	2			38	06			3812
3803	3			38	08			3814
3804	£			38	10			3816
		-					* *	

in Leatherette Roll

List Price \$9.25



SET T-52

CONTENTS

3801	3805	3811
3802	3806	3812
3803	3808	3814
3804	3810	3816
6"	Long Nose	Pliers

6" Cutting Pliers Neutralizing Tool

List Price \$15.50



SQUARE SPINTITES

No.	Size	List	No.	Size	List
3505	$\frac{5}{3.2}$	\$1.00	3511	11	\$1.25
3506	3	1.00	3512	3/8	1.25
3507	32	1_00	3513	13	1.50
3508	1/4	1.00	3514	7	1.50
3509	$\frac{9}{32}$	1.00	3516	1/2	1.85
3510	5 1 A	1.00	3520	5/8	1.85



FOUR-IN-ONE NEUTRALIZING AND ALIGNING TOOL

Made entirely of shock-proof plastic this tool has wrenches on each end, key slot, and screwdriver tip.

3852.....List Price \$1.35



STUBBY SPINTITES

No.	Size	List	No.	Size •	List
4406	3	\$0.70	4411	11	\$0.70
4407	7 20	.70	4412	3/2	.70
4408	$\frac{\frac{7}{32}}{\frac{1}{4}}$.70	4414		1.00
4409	32	.70	4416	$\frac{\frac{7}{16}}{\frac{1}{2}}$	1.00
4410	5	.70			



SPECIAL SPINTITE FOR BAT TYPE SWITCHES

Deep cavity accommodates but handle, fine knurl is tapered to adjust for variations in knurled rings.

6337 List Price \$2.75

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE



KNURLED SPINTITES

Tapered knurls to take care of variations in size.

Number	Diameter	List Price
3710	5	\$1.50
3711	11	1.60
3712	3/ 8	1.80



PANEL CUTTERS

T T O A T D U D A 4 4	Çe
T-564—For Bit Brace	80
T-592—For Drill Chuck 4.	80



THE ORIGINAL SPINTITE

WRENCHES



1/4 Inch Square Drive — 11 Pieces

1 HINGE HANDLE 6 HEX SOCKETS 3 SQUARE SOCKETS 1 CROSS BAR

ALL IN HEAVY ENAMELED METAL BOX Special Low Price



8 Hex Sockets

3 Square Sockets 1 Reversible Ratchet

1 Hinge Handle

1 Cross Bar

1 Sliding Tee Handle

1 Short Extension

1 Long Extension

AN EXCELLENT COMBINATION OF SOCKET WRENCHES AND ATTACHMENTS FOR FINE WORK ON IGNITION, ELECTRICAL, RADIO OR HOBBY WORK.

-Alloy Steel

-Bright Plated



SET NUMBER S-217

SET NUMBER S-211

WALDEN WORCESTER SCREWDRIVERS

SQUARE SHANK SCREWDRIVER Plastic Handle



Number	Size	List Price
SS4	4 x ½	\$1.20
SS6	6 x 5 16	1.65
SS8	8 x 3/8	2.05
SS12	12 x 3/8	2.45

CROSSPOINT SCREWDRIVER

Wood Handle



Number	Size	List Price
SC3	3 x 9/64	\$0.75
SC4	4 x ½	.75
SC6	$6 \times \frac{5}{16}$.95
SC8	8 x 3/8	1.30

ROUND SHANK SCREWDRIVER

Plastic Handle



Number	Size	List Price
SM2	21/4 x 1/8	\$0.4 0
SR3	$3 \times \frac{3}{16}$.90
SR4	4 x ½	1.20
SR6	6 x 5	1.55
SR6A	6 x $\frac{3}{16}$	1.15
SR8	8 x 3/8	2.00
SR12	12 x 3/8	2.30

STUBBY SCREWDRIVER

Plastic Handle



Number	Size	List Price
SS2	1½ x ¼	\$0.80

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

VACO PRODUCTS COMPANY · CHICAGO 11, ILLINOIS · U. S. A.



Hand Forged Chrome Vanadium Screw and Nut Drivers With Amberyl* S/B* (Slo-Burn) Fire Safe Break and Shock Proof Handles *Trade Marks Registered U. S. Pat. Off.

ROUND BLADE SCREW DRIVERS



*High carbon tool steel blades only.

Stock Number	Handle Diameter and Length	Blade Diameter and Length	Weight per Doz.
A 010	13/32" x 13/4"	3/32" x 15/8"	1/4 lb.
A 130-2	1/2" x 17/8"	1/8" x 2"	1/2 lb.
A 130-3	1/2" x 17/8"	1/8" x 3"	2/3 lb.
A 116-2	1/2" x 21/2"	3/32" x 2"	2/3 lb.
A 116-3	1/2" x 21/2"	3/32" x 3"	1/3 lb.

Electrician and Cabinet Styles—1/4" Blades.

	Handle Diameter	Blade Diameter	Weight
	and Length	and Length	per Doz.
A 216-2*	5 8" x 23/4" cket Clip.	1/8" x 2"	3/4 1b.
A 216-4	3/4" x 3"	1/8" × 4"	1 lb.
A 216-6	3/4" x 3"	1/8" × 6"	11/4 lbs.
A 216-8	3/4" x 3"	1/8" x 8"	1 1/2 lbs.
A 216-10	3/4" x 3"	1/8" x 10"	1 3/4 lbs.

Electrician and Regular Cabinet Styles -3/16" Blades.

Stock Number	Handle Diameter and Length	Blade Diameter and Length	Weight per Doz.
A 316-3	7/8" x 31/2"	3/16" x 3"	11/4 lbs.
A 316-4	7/8" x 31/2"	3/16" x 4"	11/2 lbs.
A 316-6	7/8" x 31/2"	3/16" x 6"	13/4 lbs.
A 316-8	7/8" x 31/2"	3/16" x 8"	2 lbs,
A 316-10	7/8" x 31/2"	3/16" x 10"	21/2 lbs.
	6.7		7.

General Service Round Blade Styles -1/4" Blades.

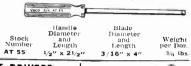
	1		
A 416-10	1" x 35/8"	1/4" x 10"	31/2 lbs.
A 416-8	1" x 35/8"	1/4" x 8"	31/4 lbs.
A 416-6	1" x 35/8"	1/4" x 6"	23/4 lbs.
A 416-5	1" x 35/8"	1/4" x 5"	21/2 lbs.
A 416-4	1" x 35 8"	1/4" x 4"	21/4 lbs.
Stock Number	Handle Diameter and Length	Blade Diameter and Length	Weight per Doz.

Heavy Duty General Service Round Blade Styles — 5/16" Blades.

Stock Number	Handle Diameter and Length	Blade Diameter and Length	Weight per Doz,
A 516-6	1-1/16" x 4"	5/16" x 6"	4 1bs.
A 516-8	1-1/16" x 4"	5/16" x 8"	41/2 lbs.
A 516-10	1 1/8" x 41/4"	5/16" x 10"	51/2 lbs.
A 516-12	1 1/8" x 4 1/4"	5/16" x 12"	61/2 lbs.

RADIO ALIGNING TOOLS NON-METALLIC ALIGNER

No metal - completely non-capacitance. Bone fibre blade may be repointed as required.



VACO Super Hard NUT DRIVERS

Color Coded Hollow Handles For Quick Size Identification, For Use on Hardened Steel Self-Threading Sheet Metal Screws, Etc.



ALL HOLLOW SHAFT NUT DRIVERS



VACO EXTRA HARD NUT DRIVERS

Size Stamped on Each Shaft for Easy Identification Solid Amberyl S/B Fire Safe Handles



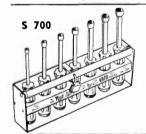
Extra Large Size

Stock	Hexagon	Handle Diameter	Weight
lumber	Size	and Length	per Doz
5 17	17/32"	1-1/16" x 4"	41/2 lbs
5 18	9/16"	1-1/16" x 4"	41/2 lbs
5 19	19/32"	1-1/16" x 4"	41/2 lbs
5 20	5/8"	1-1/16" x 4"	41/2 lbs



No. S 500 METAL BENCH HOLDER

Furnished with 1 each of five most popular sizes: \$8, \$10, \$11, \$12, \$14. Weight each . . . 11/2 lbs.



Stock

Number 5 160 5 180

VACO WALL OR BENCH PADLOCK TYPE NUT DRIVER STAND

Holds One Complete Driver Outfit . . . from 3/16" to 1/2".

Stock	Weight
Number	(Packed)
\$ 700 \$ 70 (Stand only)	21/4 lbs. 1 lb. 2 oz.

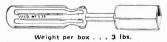
VACOMBO Nut Setter Kit No. ZS 60 Kit Consists of:

Junists 01:

- ZH 1 Amberyl Handle with Clutch
- ZS 8 Hex. Wrench ½4" x 3"
- ZS 10 Hex. Wrench 516" x 3"
- ZS 11 Hex. Wrench 11 32" x 3"
- ZS 12 Hex. Wrench 12" x 3"
- ZS 12 Hex. Wrench 54" x 3"
- ZS 12 Ker. Wrench 756 x 3"
- ZR 77 Seven Section Leatherette Tool Roll

Also Avallable
6" Extension No. ZX 56
3/16" Hex. Wrench No. ZS 6
1/2" Hex. Wrench No. ZS 16

VACO AMBERYL ELECTROLYTIC CONDENSER **NUT DRIVERS**



Packed 4 each of following sizes in display box, or as-sorted as desired: No. 5 32 for 31/32" Nuts No. 5 36 for 1-5/32" Nuts

VACOMBO Screw Driver Kit No. ZB 50 Kit Consists of:



ZH 1 Amberyl Handle with Clutch, 1" x 35/8"

ZB 24 Blade 3/8" x 4" Out of Handle

ZB 34 Blade 3/16" x 4" Out of Handle

ZB 45 Blade 3/16" x 5" Out of Handle

ZB 45 Blade No. 1 Phillips x 4"

ZP 14 Blade No. 2 Phillips x 4"

ZP 72 Blade No. 2 Phillips x 4"

ZP 72 F 75 Seven Section Leatherette Tool Roll

Also Available — 6" Extension No. ZX 56 Specifications: Amberyl S/B (Slo-Burn) Fire S Handle — Oil Tempered Chrome Vanadhum Blades Bright Caumium Rust-Poof Plated Finish,

Weight packed . . . 8 oz.

AMBERYL HANDLE PHILLIPS SCREW DRIVERS



WOOD HANDLE PHILLIPS SCREW DRIVERS

High Cathon Tool Steel Blades . . . Chrome Vanadium Blades Also Available.



VACO DUPLEX REVERSIBLE SCREW DRIVERS with Amberyl S/B (Slo-Burn) Plastic Handle





Precision engineered blade may easily be inserted or removed and reversed to provide either a regular or Phillips bit. Ideal for automobiles, radios, refrigerators, household utilities. toys. etc., where straight slot screws and cross slot screws are frequently used in combination.

ALPHA

tri-core solders

An American Solder for American Production Methods

INSURE PERFORMANCE-SPECIFY ALPHA TRI-CORE



TRI-CORE ROSIN-FILLED SOLDER

Craftsmen prefer this faster, easier sequence solder. It provides more uniform fluxing and stronger joints for Radio, Electrical, and Automotive work. Saves time, money and labor for manufacturing or repair service.

WHY TRI-CORE ROSIN-FILLED IS THE IMPROVED SOLDER: • three independently

- filled cores assure flux continuity, eliminate risk of empty flux sections.
- thinner solder walls speed melting, cut soldering time by 25% or more
- no activating chloride agent to produce acid

conditions and toxic vapors.

- forms a clean, smooth strong joint without carbonizing.
- three cores instead of one at no premium in price.
- all gauges from 1/4" and heavier down to 0.020" and finer.



TRI-CORE "LEAKPRUF" ACID-FILLED SOLDER

Why put up with old-fashioned, leaky acid-cored solders? Mechanics acclaim Tri-Core's cleaner job, long shelf life, and guaranteed leakproof feature. Now you can protect yourself as well as your reputation for better craftsmanship with this development in the field of acid-cored solders!

WIDELY PREFERRED FOR BETTER SOLDERING:

- The only three cored acid-filled solder.
- No solder waste due to fluxiess areas.
- Highly soluble flux washes off with water.
- Non-toxic, and emits no offensive odors.
- Virtually non-sputtering, reduces hazards.
- Readily solders stainless steel, monel, nickel, etc.
- Leakproof; drip-proof; chalk-like flux will not leak to damage tools.
- The only acid core solder that can be formed into rings and other shapes, or cut to lengths without flux loss.



ALPHA SOLID SOLDER WIRE

Alpha's specialized know-how in lead and tin metallurgy and completely modern production facilities assures you of the finest solder wire available. Alpha's unique extrusion process assures a completely homogenized and uniform solder wire throughout. Supplied in any diameter and composition for your needs.

ALPHA PREFORMS



Alpha's preformed solders, in any shape or diameter required, cut many hours from your production time. Whether you use induction heating, flame jigs or heating ovens, we can swiftly supply your requirements in washers, rings, cut shapes, drops, pellets, solder foil, or other special shapes.

HANDY CAN PACKAGING



Alpha tri-core, rasin-filled, handy-cans: retail list 25c, packed in eye-appealing, sales-compelling, self-selling, safety flange tins, 12 cans per metal-edged display carton. 12 cartons per shipping container, Weight: 1 gross-25 pounds.

Alpha tri-core, "Leak-Pruf" acid-filled handy-cans: retail list 25c, packed in multiple color lithographed safety flange tins. 12 cans per metal-edged display carton. 12 cartons per shipping container. Weight: 1 gross-25 pounds.

STANDARD PACKING

1 LB. SPOOLS packed in indi- spools per shipping convidual cartons; 50 cartons per shipping container. 5 LB, SPOOLS packed 10

tainer, 20 LB. SPOOLS packed 2 or 3 spools per shipping container.

SPECIAL ALLOYS

STANDARD ALPHA TRI-CORE SOLDERS ARE 40/60. Also available in 25/75-35/65-45/55-50/50-60/40. ALPHA SOLID SOLDER wire in all alloy ratios.

> Available in all diameters from 1/4" and heavier, down to 0.020" and finer.

ALPHA METALS, INC.



RADIO CHASSIS PUNCHES KNOCKOUT PUNCHES AND CUTTERS

Greenlee Tool Co., Rockford, Illinois

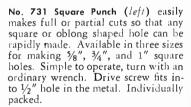


No. 730

RADIO CHASSIS PUNCHES No. 730 Round Punch shown at left,

Nos. 730 and 731

quickly cuts accurate, round holes in radio chassis for sockets, plugs, and other receptacles. No reaming or filing -hole is smooth, perfect. Operates simply with an ordinary wrench for drive power. Just insert in a 3/8" or 1/2" drilled hole and turn drive nut. 13 sizes from 1/2" to 21/4" as shown in table at right. Individually packed. Odd-size holes for meters can be made with other punches and cutters shown below.





No. 731

No. 735 KNOCKOUT **PUNCH SET**

For fast, easy cutting of holes in metal up to 1/8-inch or 10-gauge thickness. Insert in small opening and drive with an ordinary wrench. Speeds radio set work, cuts cleanly, no reaming and filing. Set includes four punches for making $\frac{3}{8}$, $1\frac{3}{32}$, $1\frac{11}{32}$, $1\frac{11}{16}$ inch holes. Packed in leather case.

No. 737 KNOCKOUT PUNCH SET

Similar to the No. 735 set, but consists of two punches . . . for cutting holes $1\frac{15}{16}$ and $2\frac{3}{8}$ inch diameter. Packed in leather case.



Nos. 738 and 739 KNOCKOUT PUNCHES

For cutting holes 27/8" diameter (No. 738) and 31/2" diameter (No. 739) in metal up to 1/8" or 10 gauge thickness. Similar in design and operation to that of smaller GREENLEE Knockout Punches. Packed and sold individually.



No. 740 KNOCKOUT CUTTER

Excellent tool for making meter openings and other large holes needed in radio work. Quickly cuts holes 115, 23/8, 27/8, 31/2-diameter. Operation is simple . . . driven with ordinary wrench. Special discs can be furnished for cutting odd-size

holes from 115 to 31/2-inch diameter. Packed in leather case. Wt. (lbs.) No. 740 Knockout Cutter \$15.00 41/5

No. 730 List Price and Weight	in Daymala Each
	Price Weight
1/2" Complete AV1760 Punch	\$2.15 1.25
AV1759 Die	.65
%" Complete AV1742 Punch	2.15 ½4 1.25 ½6
AV1742 Punch AV1743 Die AV1675 for ½" & ¾" Punches	.65 .25
3/4" Complete	2.15
AVI13 Punch AVI14 Die	1.25 16 .65 16
	2.15 3/8
AV121 Punch AV122 Die AV322 Screw for ¾" & ½" Punches 1" Complete	.65
1" Complete	.25 2.35 3/8
AV87 Punch AV88 Die	2.35 3/8 1.35 1/8 .75 1/4
1 de Complete	2.50 5/8
AV1763 Punch AV1764 Die	1.45 1/4 .80 1/4 2.50 5/8
1 1/9" Complete	2.50 5/8 1.45 1/4
AV91 Punch AV92 Die 132" Complete	.80 2.50 %
AV83 Punch	1.45
AV84 Die	.80 ½ 2.50 5/8
AV115 Punch	1.45
AV116 Die	.80 2.50
AV117 Punch AV118 Die	1.45 ½ .80 ¾
13/8" Complete	2.85 1/8
AV119 Punch AV120 Die	1.65 3/8 .95 3/8
11/4" Camalasa	3.20 1 1.90 3/8
AV90 Die	1.05
192 Colliperee AV89 Punch AV90 Die AV112 Screw for 1" to 1½" inclusive 21¼" Complete AV437 Punch AV438 Die	.25 6.20 214
AV437 Punch	3.20 ½8 2.50 1
AV438 Die AV304 Screw for 21/4" Punch	50 1/5
No. 731 List Price and Weight	in Pounds Each
%" No. 731 Square Radio Chassis Punch AV-2891 %" Square Punch	\$3.35 complete
AV-2881 %" Square Die	
AV-2886 Drive Screw	1.15
AV-2886 Drive Screw	
AV-2886 Drive Screw	1.15 .60 .20 \$3.90 complete \$1.65
AV-2886 Drive Screw	\$3.90 complete
No. 731 List Price and Weight %" No. 731 Square Radio Chassis Punch AV-2891 %" Square Punch AV-2886 Drive Screw AV-2929 Drive Nut 34" No. 731 Square Radio Chassis Punch AV-2882 34" Square Punch AV-2883 34" Square Die AV-2893 Drive Screw AV-2893 Drive Screw AV-3914 Drive Screw AV-3914 Drive Screw AV-3914 Drive Screw AV-3914 Drive Screw AV-3915 Drive Screw AV-3915 Drive Screw AV-3915 Drive Screw AV-3915 Drive Radio Chassis Punch	1.15
AV-2886 Drive Sciew AV-2929 Drive Nut 3/4" No. 731 Square Radio Chassis Punch AV-2882 3/4" Square Punch AV-2883 4/8" Square Die AV-2914 Drive Screw AV-2929 Drive Nut 1" No. 731 Square Radio Chassis Punch AV-2884 1" Square Punch	1.15 60 60 20 20 \$3.90 complete \$1.65 1.35 7.70 20 \$4.50 complete
1" No. 731 Square Radio Chassis Punch	\$4.50 complete \$1.80 1.50 1.00
1" No. 731 Square Radio Chassis Punch AV-2884 1" Square Punch AV-2885 1" Square Die	\$4.50 complete \$1.80 1.50 1.00
1" No. 731 Square Radio Chassis Punch	\$4.50 complete \$1.80 1.50 1.00 20 Veight in Pounds Each
1" No. 731 Square Radio Chassis Punch	\$4.50 complete
1" No. 731 Square Radio Chassis Punch	\$4.50 complete
1" No. 731 Square Radio Chassis Punch	\$4.50 complete \$1.80 \$1.80 \$1.00 \$20 /eight in Pounds Each Price Weight \$10.00 23/4 10.00 41/4 14.00 53/4 19.00 71/4
1" No. 731 Square Radio Chassis Punch	\$4.50 complete \$1.80 \$1.80 \$1.00 \$20 /eight in Pounds Each Price Weight \$10.00 23/4 10.00 41/4 14.00 53/4 19.00 71/4
1" No. 731 Square Radio Chassis Punch	\$4.50 complete \$1.80 \$1.80 \$1.00 \$20 /eight in Pounds Each Price Weight \$10.00 23/4 10.00 41/4 14.00 53/4 19.00 71/4
1" No. 731 Square Radio Chassis Punch	\$4.50 complete \$1.80 \$1.80 \$1.00 \$20 /eight in Pounds Each Price Weight \$10.00 23/4 10.00 41/4 14.00 53/4 19.00 71/4
1" No. 731 Square Radio Chassis Punch	\$4.50 complete \$1.80 \$1.80 \$1.00 \$20 /eight in Pounds Each Price Weight \$10.00 23/4 10.00 41/4 14.00 53/4 19.00 71/4
1" No. 731 Square Radio Chassis Punch	\$4.50 complete \$1.80 \$1.80 \$1.00 \$20 /eight in Pounds Each Price Weight \$10.00 23/4 10.00 41/4 14.00 53/4 19.00 71/4
1" No. 731 Square Radio Chassis Punch	\$4.50 complete \$1.80 \$1.80 \$1.00 \$20 /eight in Pounds Each Price Weight \$10.00 23/4 10.00 41/4 14.00 53/4 19.00 71/4
1" No. 731 Square Radio Chassis Punch	\$4.50 complete \$1.80 \$1.80 \$1.00 \$20 /eight in Pounds Each Price Weight \$10.00 23/4 10.00 41/4 14.00 53/4 19.00 71/4
1" No. 731 Square Radio Chassis Punch	\$4.50 complete \$1.80 \$1.80 \$1.00 \$20 /eight in Pounds Each Price Weight \$10.00 23/4 10.00 41/4 14.00 53/4 19.00 71/4
1" No. 731 Square Radio Chassis Punch	\$4.50 complete \$1.80 \$1.80 \$1.00 \$20 /eight in Pounds Each Price Weight \$10.00 23/4 10.00 41/4 14.00 53/4 19.00 71/4
1" No. 731 Square Radio Chassis Punch	\$4.50 complete \$1.80 \$1.80 \$1.00 \$20 /eight in Pounds Each Price Weight \$10.00 23/4 10.00 41/4 14.00 53/4 19.00 71/4
1" No. 731 Square Radio Chassis Punch. AV-2884 1" Square Punch. AV-2885 1" Square Die. AV-2885 1" Square Die. AV-2887 Drive Screw. AV-2929 Drive Nut. Nos. 735, 737, 738, 739 List Price and W. No. 735 Knockout Punch Set No. 738 Knockout Punch Set No. 739 Knockout Punch No. 739 Knockout Punch Extra Parts No. 735 Knockout Punch Set No. AV121—½" Punch No. AV122—½" Die No. AV123—1½" Die No. AV124—1½" Die No. AV124—1½" Die No. AV125—1½" Die No. AV125—1½" Die No. AV128—1½" Die No. AV249—3½" x 1½" Cap Screw. No. AV440—1½" Die No. AV404—2½" Die No. AV304—3½" x 23½" Cap Screw.	\$4.50 complete \$1.80 \$1.80 \$1.80 \$1.00 20 # Geight in Pounds Each Price Weight \$10.00 \$1.00 \$1.00 \$1.400 \$1.25 \$65 \$1.45 \$80 \$1.65 \$95 \$1.90 \$1.05 \$25 \$35 \$2.30 \$2.00 \$3.20 \$2.50 \$50
1" No. 731 Square Radio Chassis Punch. AV-2884 1" Square Punch. AV-2885 1" Square Die. AV-2885 1" Square Die. AV-2887 Drive Screw. AV-2929 Drive Nut. Nos. 735, 737, 738, 739 List Price and W. No. 735 Knockout Punch Set No. 738 Knockout Punch Set No. 739 Knockout Punch No. 739 Knockout Punch Extra Parts No. 735 Knockout Punch Set No. AV121—½" Punch No. AV122—½" Die No. AV123—1½" Die No. AV124—1½" Die No. AV124—1½" Die No. AV125—1½" Die No. AV125—1½" Die No. AV128—1½" Die No. AV249—3½" x 1½" Cap Screw. No. AV440—1½" Die No. AV404—2½" Die No. AV304—3½" x 23½" Cap Screw.	\$4.50 complete \$1.80 \$1.80 \$1.80 \$1.00 20 # Geight in Pounds Each Price Weight \$10.00 \$1.00 \$1.00 \$1.400 \$1.25 \$65 \$1.45 \$80 \$1.65 \$95 \$1.90 \$1.05 \$25 \$35 \$2.30 \$2.00 \$3.20 \$2.50 \$50
1" No. 731 Square Radio Chassis Punch. AV-2884 1" Square Punch. AV-2885 1" Square Die. AV-2885 1" Square Die. AV-2887 Drive Screw. AV-2929 Drive Nut. Nos. 735, 737, 738, 739 List Price and W. No. 735 Knockout Punch Set No. 738 Knockout Punch Set No. 739 Knockout Punch No. 739 Knockout Punch Extra Parts No. 735 Knockout Punch Set No. AV121—½" Punch No. AV122—½" Die No. AV123—1½" Die No. AV124—1½" Die No. AV124—1½" Die No. AV125—1½" Die No. AV125—1½" Die No. AV128—1½" Die No. AV249—3½" x 1½" Cap Screw. No. AV440—1½" Die No. AV404—2½" Die No. AV304—3½" x 23½" Cap Screw.	\$4.50 complete \$1.80 \$1.80 \$1.80 \$1.00 20 # Geight in Pounds Each Price Weight \$10.00 \$1.00 \$1.00 \$1.400 \$1.25 \$65 \$1.45 \$80 \$1.65 \$95 \$1.90 \$1.05 \$25 \$35 \$2.30 \$2.00 \$3.20 \$2.50 \$50
1" No. 731 Square Radio Chassis Punch. AV-2884 1" Square Punch. AV-2885 1" Square Die. AV-2885 1" Square Die. AV-2887 Drive Screw. AV-2929 Drive Nut. Nos. 735, 737, 738, 739 List Price and W. No. 735 Knockout Punch Set No. 738 Knockout Punch Set No. 738 Knockout Punch No. 739 Knockout Punch Extra Parts No. 735 Knockout Punch Set No. AV121—½" Punch No. AV122—½" Die No. AV123—1½" Die No. AV124—1½" Die No. AV124—1½" Die No. AV125—1½" Die No. AV125—1½" Die No. AV126—1½" Die No. AV128—1½" Die No. AV129—3½" x 1½" Cap Screw No. 737 Knockout Punch Set No. AV39—1½" Punch No. AV449—1½" Die No. AV449—1½" Die No. AV440—1½" Die No. AV441—2½" Die No. AV304—3½" x 2¾" Cap Screw No. 738 Knockout Punch No. AV304—3½" x 2¾" Cap Screw No. 738 Knockout Punch No. AV1429—2½" Die No. AV304—3½" x 2¾" Cap Screw No. 738 Knockout Punch No. AV1430—2½" Die No. AV1430—2½" Die No. AV1434—Drive Nut No. AV1434—Drive Nut No. AV1434—Drive Screw	\$4.50 complete \$1.80 \$1.80 \$1.80 \$1.00 \$20 Veight in Pounds Each Price Weight \$10.00 \$1.00 \$1.00 \$1.4.00 \$1.5.00 \$1.5.00 \$1.5.00 \$1.3.50 \$2.75
1" No. 731 Square Radio Chassis Punch. AV-2884 1" Square Punch. AV-2885 1" Square Die. AV-2885 1" Square Die. AV-2887 Drive Screw. AV-2929 Drive Nut. Nos. 735, 737, 738, 739 List Price and W. No. 735 Knockout Punch Set No. 738 Knockout Punch Set No. 738 Knockout Punch No. 739 Knockout Punch Extra Parts No. 735 Knockout Punch Set No. AV121—½" Punch No. AV122—½" Die No. AV123—1½" Die No. AV124—1½" Die No. AV124—1½" Die No. AV125—1½" Die No. AV125—1½" Die No. AV126—1½" Die No. AV128—1½" Die No. AV129—3½" x 1½" Cap Screw No. 737 Knockout Punch Set No. AV39—1½" Punch No. AV449—1½" Die No. AV449—1½" Die No. AV440—1½" Die No. AV441—2½" Die No. AV304—3½" x 2¾" Cap Screw No. 738 Knockout Punch No. AV304—3½" x 2¾" Cap Screw No. 738 Knockout Punch No. AV1429—2½" Die No. AV304—3½" x 2¾" Cap Screw No. 738 Knockout Punch No. AV1430—2½" Die No. AV1430—2½" Die No. AV1434—Drive Nut No. AV1434—Drive Nut No. AV1434—Drive Screw	\$4.50 complete \$1.80 \$1.80 \$1.80 \$1.00 \$20 Veight in Pounds Each Price Weight \$10.00 \$1.00 \$1.00 \$1.4.00 \$1.5.00 \$1.5.00 \$1.5.00 \$1.3.50 \$2.75
1" No. 731 Square Radio Chassis Punch. AV-2884 1" Square Punch. AV-2885 1" Square Die. AV-2885 1" Square Die. AV-2887 Drive Screw. AV-2929 Drive Nut. Nos. 735, 737, 738, 739 List Price and W. No. 735 Knockout Punch Set No. 738 Knockout Punch Set No. 739 Knockout Punch No. 739 Knockout Punch Extra Parts No. 735 Knockout Punch Set No. AV121—½" Punch No. AV122—½" Die No. AV123—1½" Die No. AV124—1½" Die No. AV124—1½" Die No. AV125—1½" Die No. AV125—1½" Die No. AV128—1½" Die No. AV249—3½" x 1½" Cap Screw. No. AV440—1½" Die No. AV404—2½" Die No. AV304—3½" x 23½" Cap Screw.	\$4.50 complete \$1.80 \$1.80 \$1.80 \$1.00 \$20 Veight in Pounds Each Price Weight \$10.00 \$1.00 \$1.00 \$1.4.00 \$1.5.00 \$1.5.00 \$1.5.00 \$1.3.50 \$2.75

Harry Davies Molding Co.

Molders of Plastics

1428 NORTH WELLS STREET . CHICAGO 10, III.

STANDARD COLORS FOR DAVIES KNOBS: Black, Walnut, Red or Ivory. Others to order. Quality radio knobs for standard 1/4" shaft. Set screw, spring, or knurled hole mounting, or 1/4" brass bushing.

ELECTRONIC INSTRUMENT KNOBS



4103	23/8''	7∕8''
4102	15/8"	3/4"
4101	l 3/8''	11/16"
4100	11/8"	5/8''
Type No.	Width	Height



Type No.	Width	shaft center
41 00-P	11/8"	7/8''
4101-P	13/8"	11/16"
4102-P	l 5/8''	11/16"
4103-P	23/8"	19/16"



Type No.	Width	Skirt diameter
41 04	11/8"	11/2"
4106	13/8''	11/2"
4108	15/8"	3"
4109	23/8"	21/16"



No. 1400. (With pointer). Height ¹³/₃₂". Diameter ¹¹/₁₆". No. 1450. (No pointer). Height ¹³/₃₂". Diameter ¹¹/₁₆". Set screw, spring, or knurled hole mounting.



No. 1700.

Height ¹⁹/₃₂". Diameter ³/₄".

Set screw, spring, or knurled hole mounting.



No. 2500. Height 3/4". Diameter 3/4".

No. 2600.

Height ½". Diameter ½".

Set screw, spring, or knurled hole mounting.



No. 2965.

Short Shank. Dia. 7/8"; Hgt. from 1/2" to 11/2".

Medium Shank. Dia. 7/8"; Hgt.

Medium Shank, Dia, 1/8"; Hgt. from 9/16" to 11/2".

Long Shank, Dia, 7/8"; Hgt. from 9/16" to 11/2".

This type knob can be supplied with arrow; Off-On; Tuning; Volume; Tone; Batt-Elec.; Band Switch; Radio-Phono, or Dot markings.

Set screw, spring, or knurled hole mounting.



No. 3008.

Dia. 11/4"; Hgt. 3/4". No. 3009.

Dia. 11/2"; Hgt. 3/4". No. 3000

Long Shank Dia. 1¾"; Hgt. ¾", I", I¼" and I½".

Short Shank. Dia. 1 $\frac{3}{4}$ ". Hgt. $\frac{3}{4}$ ", 1", 1 $\frac{1}{4}$ " and 1 $\frac{1}{2}$ ".

1/4" molded hole or brass insert. Plain or threaded hole. Set screw or knurled hole mounting.



overall Hgt. Dia.
No. 2110 15/8" 19/32" 3/4"
No. 2100 21/2" 5/8" 3/4"
Molded hole or brass insert, set screw

Length

Pointer from

mounting.
No. 2110-P 115/16" 19/32" 3/4"
No. 2100-P 213/16" 5/8" 3/4"

Metal insert and pointer, set screw mounting.



No. 2300—Zephyr bar knob. Length 1 4".

No. 2350—Zephyr bar knob.
Length 2".

Molded hole, set screw mounting.

No. 2300-A—Zephyr bar knob.

Length 11/4".

No. 2350-A—Zephyr bar knob. Length 2".

1/4" brass insert and set screw.



No. 1800 Series
These can be furnished in either
plain or recessed
tops. Dia. 7/16";
Heights range
from 1" to 13/8".
Also supplied

with studs of var-

ious lengths.



No. 5149 — Rectangular touch tuning knob. Push on, self-locating.
No. 5149-A—Oval touch tuning knob. Push on, self-locating.
Hgt. 13/16" - 11/32".

No. 1750—Touch Tuning. Push on, selflocating.

No. 1760—Touch Tuning, Recessed top, push on, self-locating. Dia. 31/64". Hgt. 9/16", 11/16".

No. 1770—Binding Post and Switch knob. No. 6-32 and No. 8-32 brass inserts. Dia. 31/64". Hgt. 1/2", 5%1", 3/4", 7/8".



No. 2710
Height 1/2". Dia. 3/4".
Metal-faced insert
or plain insert.
Female thread available 8-32, 10-32

and 10-24.



No. 2150 Streamlined bar knob. Length 11/4"



No. 1780

Push button knob. Dia. $\frac{1}{2}$ ". Hgt. 1", $\frac{1}{8}$ ", $\frac{17}{32}$ ", $\frac{13}{8}$ ".

No. 1790

Recessed top. Dimensions same as No. 1780.

FACTORY & GENERAL OFFICES — 1428 NO. WELLS ST., CHICAGO 10, ILL.

Branch Offices: Baltimore, Cincinnati, Grand Rapids, New York, Los Angeles and Milwaukee

Foreign Office: Toronto, Canada

SIN MULTICORE SOLDI



SEVEN POUND REELS



ONE POUND CARTONS



Our claim is a simple one: We believe that ERSIN MULTICORE is the finest cored solder in the World!

Ersin Multicore is solder in the form of wire containing three cores of non-corrosive Ersin Resin Flux. No extra flux is required. The use of Ersin Multicore guarantees that the correct proportion of flux to solder is used and maximum fluxing action occurs at the correct melting point of the solder. Only by using solder

wire with three cores of flux is it possible to be sure the flux is always present-that there will not be lengths of wire without flux which result in "dry" or highresistance joints.

In addition to this advantage, Ersin Multicore is the only cored solder in the world containing ERSIN, an extra-active non-corrosive flux. It is high grade rosin homogeneously activated by a process which confers on the rosin the vigorous fluxing action characteristic of the more active fluxes.

You enjoy speedy and a consistently high precision standard of soldering and attain just that extra rapidity which guarantees economy of operation. Ersin Flux not only removes surface oxides prior to soldering, but prevents formation during the soldering period. You can satisfactorily solder components which are highly oxidized-ones on which it would be necessary to undertake additional mechanical or chemical processes when using any other type of flux.

In Ersin Flux, the protective qualities of the original rosin are preserved. Joints made with Ersin Multicore Solder will not corrode even after prolonged exposure to any degree of humidity. The flux residue is impervious to moisture. It is hard and not sticky. It avoids accumulation of dirt and impurities on the joint.

Every reel or carton of Ersin Multicore is clearly marked both as to Gauge and Alloy, showing the actual content of Tin and Lead. You know exactly what you are getting when you buy Ersin Multicore Solder! Multicore costs a fraction more initially, but is unquestionably most economical in the long run.

Ersin Multicore Solder is available in all Tin/Lead alloys and in standard wire gauge from

10 to 22. (14, 16 and 18 s.w.g. are most popular.)

Ersin Multicore is the only solder which offers you these two fundamental advantages: (1) Multicore construction, providing three cores which assure perfect joints; (2) Ersin Flux, our exclusive fast non-corrosive flux.

Ersin Multicore is the answer for those who seek the finest Cored Solder in the World!

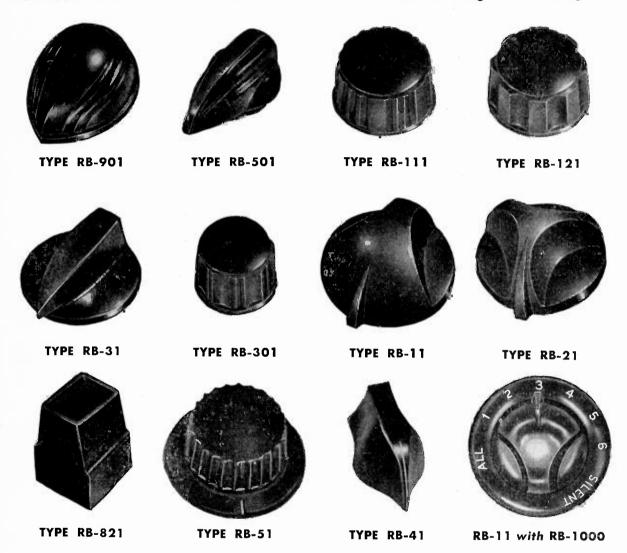


The Original Three Cored Solder

ROGAN KNOBS FROM STOCK MOLDS

For All Types of Instruments and Apparatus . . . Low Cost . . . Immediate Delivery

ROGAN BROTHERS . Compression Molders and Branders of Plastics . 2506 W. Irving Pk. Rd., Chicago 18



WIDE SELECTION OF SHAPES AND SIZES

Shown above, are but a few of the many Rogan plastic knobs available to you from our regular stock molds. These are supplied without tool charge, resulting in considerable savings in cost, faster delivery. Choice of a wide selection of sizes, shapes and colors. Molded of phenolic or urea thermosetting materials, which will not soften, warp, or scratch easily. Heat resisting materials can be used so knobs can withstand $350\text{-}400^{\circ}$ F. continuous heat. Most knobs supplied with $\frac{1}{4}$ " shaft hole and set screws. Special shaft hole sizes and means of fastening can be supplied to specifications at nominal cost.

KNOBS CAN BE BRANDED, AS REQUIRED

Rogan's famous "deep relief" branding process, applied after molding, provides sharp perfect marking at low cost. Any type marking, graduations or numerals can be branded on blank knobs to fit your requirements. Rogan knobs are available in black, brown or walnut, when molded of phenolic materials; and in all light pastel colors when molded of urea materials. Whatever your knob requirements may be, Rogan is equipped to supply you faster, better, more economically. The complete line of Rogan knobs with specifications is shown in the new Rogan catalog. Write for your copy now.

STAPLE DRIVER - TUBE PULLERS DIAL BELTS-GRILLE CLOTH & SCREENING

BEVERLY HILLS, CALIFORNIA

WALSCO STAPLE DRIVER "NEW IMPROVED GUARANTEED MODEL"

Patent No. 2,285,384

Pays for itself on the first job!

- A sensational tool for installing wires and cables, that saves time and money.
- Used by Radio, Public Address and Intercom Technicians.
- Staples into corners and other inaccessible places.
- Staples on hard surfaces such as plaster, hardwood, etc.
 - Can be loaded in 10 seconds.

This tool automatically positions the staple then one or two strokes with the palm of the hand and the staple is driven home neatly, quickly, and accurately. A small trigger regulates the feeding mechanism to enable the operator to strike the handle on hard surfaces as often as necessary before a second staple leaves the magazine. Staples come in strips, are large enough for cables and wires up to 1/4" diameter. An adjustable regulator controls the depth to which the staple is driven into surface, thus preventing damage to the insulation of the wire.

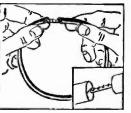
Cat. List No. Price	Dealer's Net
500-Staple Driver Complete, including box of staples \$8.25	
507—Rubber Cap for Head of Staple Driver. 0.37	0.22
550—Box of 250 Carbon Steel Staples. 0.60	0.36
552—Box of 1000 Carbon Steel Staples 2.25	1.35
Staples put up in handy strips; available in plain, brown or ivory finish.	

WALSCO TUBE PULLERS



The first practical tube pullers ever devised for the electronic trade. Lift out tubes by wedging action betwee base and socket, without applying strain to the glass. Tubes are securely held while extracting or inserting. Made of tempered steel throughout. Attractively and durably finished.

WALSCO UNIBELT A NEW UNIVERSAL DIAL-DRIVE BELT ADJUSTABLE TO FIT ANY DIAL DRIVE





Covered by Patent No. 300,706

- Eliminates need for stocking 96 different sizes of belts. Unibelt gives the Radio Man the correct size belt for every make and model set.
- Easily installed in a few minutes. No need for taking dial Put up on spools in continuous lengths which will make five or
- Tut up on spools in continuous lengths which will make five or more average belt replacements.
 New patented construction incorporates special stainless steel core and pure latex covering.
 Belts cannot stretch, and when properly installed will not slip, fray or break.
 Unconditionally guaranteed.

The ingenious construction of the New WALSCO Unibelt makes it possible to assemble any size belt by merely cutting the desired length and joining the ends with a simple "zipper-like" connector. The connected belt cannot stretch and has a breaking strength of over 60 lbs. ONLY ONE SIZE NEEDED for any belt replacement job. placement job.
List Dealer's Cat. Price 303-

-5-ft. spool Unibelt (with 10 connectors and \$2.75 \$1.65 instructions)

WALSCO DIAL DRIVE BELTS

- Precision Made.
- No Stretch No Slip.
- ٠ Smooth and Uniform.

 Exceptionally Strong. Available for any type of radio set. Specially constructed to give long lasting, trouble-free service. Treated for maximum friction and to provide accurate tuning. WALSCO Dial Belts are uniformly thick throughout the entire length and are precision made and guaranteed to fit perfectly.



List Price Each, \$0.25

Also put up in Kits of 25, 50, 100 and 150 Belts

Cat. No.

565—Standard Puller, for all metal, GT, Locktal and most regular glass tubes. Also for extracting \$1.95 vibrators and for pulling knobs.

Right-Angle Puller, for metal, GT, Locktal and most regular glass tubes. Designed for extracting and inserting tubes without removing chasis from cabinet.

Standard Puller, for all Miniature Tubes. Pulls out straight and thereby prevents tube breakage or bending of pins. 2.40 568-Right-Angle Puller, for Miniature Tubes.....

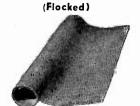
GRILLE CLOTH



Highest quality. acoustically perfect cloth available to match wainut, mahogany or light wood finishes.

Cat. No.	Size	List Price
362 362-1	18" x 24" 1 yard x 5 1 yard x 4	\$0.60 1.50 2" (packaged) 6.25 0" (packaged) 4.95 naterial in bulk, mini-
		rder: 5 yards, per yd. 5.75

GRILLE SCREENING



Galvanized, rayon-flock covered screening. Attractive, weatherproof and modern. For autoradios, P.A. and Intercom. speakers, etc.

Cat.			,
Brown		Size	List Price
374-1	374-3	8" x 11"	\$0.85
376-1	376-3	18" x 24"	2.90
378.1	378-3	26" v 26"	9.00

ORNAMENTAL METAL GRILLE



Heavy perforated grille, beautifully "brushed brass" plated and lacouered with gold finish brass' plated and lacquered with gold finish effect. For use over cloth or screening in custom-built radios, high quality P.A. speakers, juke boxes, etc.

	1 50	Cat.	No.			Cat.		List
ged)	6.25	Brown	lvory	Size	List Price	No.	Size	Price
red)	4.95	374-1	374-3	8" x 11"	\$0.85	382	12" x 18"	\$2.75
bulk, mini-		376-1	376-3	18" x 24"	2.90	384	18" x 24"	5.00
rds, per yd.	5.75	378-1	378-3	36" x 36"	9.00	386	24" x 36"	9.50
PRICES F	OR BU	LK QUAI	NTITIES	AND SPECIAL	SIZES QUOTE	D ON	REQUEST	



DIAL CABLES AND CORDS—TEST RECORDS WIRE STRIPPER - PROTECTO-TUBE

BEVERLY HILLS, CALIFORNIA

WALSCO DIAL CABLES AND CORDS

WALSCO Dial Cables and Cords are manufactured to meet the most rigid standards of the Government, Radio Industry and Engineering Laboratories. The finest raw materials are used and production is controlled to supply a uniform product with an absolute minimum stretch factor. All standard Cords are made with NYLON braid, known to have the highest abrasion resistance. These selected materials, plus special chemical treatment after fabrication, make WALSCO Cords the finest on the market. WALSCO Dial Cords are used by leading manufacturers as a standard component. usable storage boxes with sliding lids.



25-ft. and 100-ft. spools are packaged in clear plastic, re-u
HEAVY CORD-Diameter .062"-Same as used on many Phileo and
Majestic sets, Very durable, and treated to prevent slipping.
No. 33 List Price \$1.75
No. 33-1C List Price 4.60
BRONZE CABLE-16-Strand Braided-Diameter .039"-Breaking
Strength 50 lbs A braided cable with good flexibility and abrasion
resistance. "Fiber-glass" is used as core material and the braid is
constructed of special hard Cadmium bronze. Does not unravel.
No. 31 List Price \$1.20
No. 31-1C List Price 3.45
No. 31-5C 500 ft. List Price 14.00
Principles Problem CARLE 40 Strand Diameter 039"-Rreak-

PHOSPHOR BRONZE CABLE—42-Strand—Diameter .032"—Breaking Strength 60 lbs.—A very fiexible metal cable constructed of 42 strands of hard Phosphor bronze over a "Fiber-glass" core. Extremely durable. Used for replacement of dial cables and many special applications where a strong, stranded cable is required. No. 30 25 ft. List Price \$1.50 No. 30-1C 100 ft. List Price 500 No. 30-5C 500 ft. List Price 20.00

SPECIAL THIN BRONZE CABLE—Diameter .022"—An extra-thin cable for dial drives, flexible connections, pigtails, and many other applications—wherever a thin, but strong cable is required.

No. 32

25 ft. List Price \$1.20

No. 32.1C List Price \$1.20 List Price 3.45 List Price 14.00 100 ft.....

No. 32-1C No. 32-5C 500 ft The following cords cover over 80% of the replacement demand. With one spool of each kind on hand, the serviceman has the proper size for practically any set manufactured since 1934. Constructed with "Fiber-glass" or linen core and "pre-stretched," these are the most efficient cords available. The braided sleeves are made of Nylon.

			L	IST PRIC	ES
Cat.		Breaking	Fe	et Per Sp	looi
No.	Diam.	Strength	25	100	500
1		"SPECIAL THI	N''		
35	.025"	25 lbs	\$1.25		
35-1C	.025"	25 lbs		\$4.50	
35-5C	.025"	25 lbs			\$13.00
		STANDARD			
39	.032"	30 lbs	\$1.25		
39-1C	.032"	30 lbs		\$4.50	
39.5C	.032"	30 lbs			\$13.00
(MEDIUM			
34	042"	35 lbs	\$1.25		
34-1C	.042"	35 lbs		\$4.50	
34-5C	.042"	35 lbs			\$16.00
	-				

STANDARD PACKAGE-12

WALSCO ALL-PURPOSE WIRE STRIPPER



All these features in ONE model: Strips all wires from 16 to 22gauge • Strips 300-ohm twin lead
 Has built-in wire cutter • Has automatic locking device which prevents crushing of stranded wire • Made entirely of steel and will last a lifetime.

Strips insulation quickly and cleanly. Precision-ground blades will not nick or cut wire strands. Especially made for wire types and sizes used in electronic work, but equally applicable for automotive, aviation, and telephone trade.

Blades are hardened and precision-ground, and will last for thousands of stripping and cutting operations. Can readily be replaced when dulled. Operation is extremely easy, requires no purticular skill or experience. From 700 to 1000 wires can be stripped per hour. Equally adaptable for the production line or for use "on the job."

		L121	Dealer
Cat. No.	Description	Price	Net
	LSCO All-Purpose Wire Str		\$6.57
	placement Blade Set for No		1.20
	cial "Wide-Range" Model		
Tra	de. Strips all wire gauges f	rom No. 10 to	
	22		6.57
591-1-Rer	lacement Blade Set for No	591 2.00	1.20

WALSCO PROTECTO-TUBE



A new synthetic tubing especially designed for insulating handles of pliers, screwdriver blades, cable connector ends, test prods, etc. This tubing is highly abrasion-resistant for long wear, and will not crack or shatter. Special Expanding Solution is furnished as part of the kit and "swells" tubing to permit easy application. Upon drying, tubing shrinks on tight. on tight.

Protecto-Tube Kit, containing approx. 12 ft. assorted sizes and colors of WALSCO Protecto-Tube, jar of Expanding Solution, and instructions.

Cat. No. K-18List Price \$1.65

POPULAR DIAL CORD IN SMALL PACKAGES

Cat. No. List Price
3070 - Approximately 10 ft. Special Thin Cord (Type 35) \$0.40
3080—Approximately 8 ft. Medium Cord (Type 34) 0.40 3090—Approximately 8 ft. Standard Cord (Type 39) 0.40
(Standard Package 20; available on display card or box)

WALSCO STANDARD TEST RECORDS FOR TESTING AND ADJUSTING RECORD PLAYERS, CHANGERS



PICK-UPS, AND

set. List Price \$9.90 Cat. No. 720—10" record with accelerated pitch. Playing time approximately 45 sec. Lead-in grooves modulated with 3 tones to indicate set-down position of pick-up. Proper tripping action indicated by tone signals at end of record. Both sides of record identical

by tone signals at end of record. Both sides of record identical
List Price \$1.65
Cat. No. 721—10" record. One side with accelerated pitch and without starting spiral for checking "feed-in" of pick-up. Other side same as No. 720.
List Price \$1.65
Cat. No. 725—10" record. One side: Sweep Frequency Record at N.A.B. standard level. Range 10,000 to 50 c.p.s. Cross-over to constant amplitude at 500 c.p.s. Other side same as No. 720.

List Price \$1.90
Cat. No. 726—10" record. One side: Test Frequency Record at N.A.B.

Cat. No. 726—10" record. One side: Test Frequency Record at N.A.B. standard level. Range 10,000 to 50 c.p.s. in 16 steps. Other side same as No. 720. List Price \$1.90 Cat. No. 727—10" record. One side contains 1000 and 400-cycle tone for 1 min. each. Especially designed for testing irregular turntable speed ("WOW"). Other side same as No. 720. List Price \$1.90 Cat. No. 728—10" record. One side contains silent (unmodulated groove for checking turn-table rumble, Other side same as No. 720. List Price \$1.65 Cat. No. 730.4—Set of four 10" records of same designes with 720.

Cat. No. 730-4—Set of four 12" records of same design as No. 730-Designed for use in connection with set No. 720-6 in checking per List Price \$9.90 formance of intermix changers.



CO ELECTRONIC HARDWARE

IN PERMANENT Transparent PLASTIC PACKED IN HANDY STORAGE BOXES with SLIDING TOPS ECONOMICAL PLASTIC BAGS

Cat.

No. †2570 *2571

*2576



WALSCO PHONO-MOTOR DRIVES

Precision made to assure constant uniform speed and made of abrasion-resistant synthetic rubber to assure long wear. For attaching, use WALSCO



Rubber (Jemei	π.		No. of		List
Cat.				Drives		Price
No.		0.D.		perpkg	. Used on	per pkg.
†2560-16	2"	2 3/8 "	32"	2 (en. Indust. Mod.	LX
					& RX	\$0.40
†2560-17	1 ½ "	1 3/4 "	3" 16"	2 .	Illiance, Seeburg,	G.E.
					V. M. 400	0,40
†2560-18	7/8 "	1 1/8 "	18"	3 8	Seeburg, R.C.A., C	3.E 0.40
†2560-19	1/8 "	3/8 " 6"	1/4 " 3 " 16 " 18 "	4 H 1 I 3 (2 I	Philco, R.C.A., e	tc 0.40
†2560-20	5 3/4 "	6"	18"	1 I	Detrola	
*2560-22	1 372"	1 ½ " 1 ½ "	18"	3 (3.I. Recorder/Cha	anger 0.40
*2560-23A	11"	1 1/8"	1/4 "	2]	R.O.A., RP-176,	177
					and most pre	
					R.C.A. Changer	8.
					Also on G.E. 8	09-J,
					etc	0.40
*2560-23B *2560-24	4 1/2 "	5 1/2 "	18" 1/4"	1 8	Same as #2560-	23A 1.00
*2560-24	2 7/8 "	3 3/8 "	1/4 "	1 1	R.C.A. 960015, 9	60260,
					960276, Also	most
					Admiral and	Cres-
					cent postwar	
					changers	0.50
†2560-25	Spring	-Drive		_ 1 1	Detrola - Utah	0.40

WALSCO KEY WRENCHES

FOR HEX AND SPLINE SOCKET SCREWS

WALSCO features three sets of socket wrenches made of special alloy steel to fit all standard socket screws used in radio and electronic equipment.

Description List Price

Assortment of 4 small HEX wrenches \$0.40

Fits set screws No. 4 to ¼" and
cap screws No. 2 to 8.

Assortment of 3 medium HEX wrenches.... 0.40

Fits set screws ¼" to ½" and cap
screws No. 8 to ½".

Assortment of 4 small SPLINE wrenches... 0.40

Fits all set screws up to ¼" and cap
screws up to No. 8. List Price Description

†3581-†3584-



WALSCO HEX & SPLINE WRENCH KIT



†3580-

A handy kit containing a complete range of wrench sizes as used in the electronic trade. The case is made of durable leatherette with double snap button closure and contains both hex (Allen) and spline wrench keys for (Bristol) No. 2 to 3/8" screws.

List Price Dealer's Net \$1.65 \$0.99

560-Wrench Kit. Standard Package - 25

WALSCO SPEAKER ADJUSTMENT SHIMS



OF NON - MAGNETIC MADE METAL

STRONG AND FLEXIBLE, SPRING TEMPER

CORROSION-RESISTANT

4 Shims of each of 4 sizes supplied in handy plastic case with screw top and pencil clip. As easy to carry as a fountain pen. Marked for easy identification. Sizes supplied—.004", .006", .008" and .010". Indispensable to the serviceman in adjusting voice coils. List Price \$0.60 Cat. No. 2550-16 Assorted Shims-4 of each size......

WALSCO PHONOGRAPH PICKUP SET SCREWS

Precision knurled head steel screws, antique bronze finished for all popular pickups and recording heads. The assortment contains several each of the popular numbers and one each of the other sizes.

Approx. No. Units



per pkg.	Used On	Size	per pkg.
10	Assorted	7 diff. sizes	\$0.40
10	Shure and others	2-56 x 5/8"	0.40
10	Most Astatic & Webster	2-64 x 3/4"	0.40
6	Most RCA, etc.	1-72 x 1"	0.40
MALC	CO THUNTARIE		

TURNIABLE RETAINING CLIPS

For holding phonograph turntables securely to spin-dle. Indispensable for portable phonographs or to pre-vent damage when shipping record players.

List Price Cat. No. *3424-4 Clips per pkg.\$0.40



WALSCO PHONO PANEL MOUNTING SPRINGS

An assortment of various sizes of conical springs as used in mounting record changer units.

List Price per pkg. \$0.40 *3385—8 Assorted Springs.....



WALSCO PICKUP CARTRIDGE MOUNTING SCREWS

An assortment containing small machine and self-tapping screws of various lengths, sizes and styles as required in fastening cartridge to pick-up arm. Especially useful when threads are stripped or replacement of different cartridge requires longer screws.

Cat. No. List Price 3365-Apprx. 30 Screws & Spacers \$0.40



WALSCO DIAL CORD CLIPS

For fastening the end of dial drive cord. The assortment contains the proper sizes for all standard thicknesses of cord.

Cat. No. *2770—Approximately 35 Clips List Price per pkg. \$0.40



WALSCO **HARDWARE ASSORTMENT**

wonderful assortment screws, nuts, washers, springs, clamps, eyelets, grommets, terminals, a.c. Only regular hardware included. Just the thing for the experimenter, ham and technician. In plastic jar.



Cat. No. List Price K3003—"1000 Piece" Hardware Assortment \$1.65 Dealer's Net \$0.99

WALSCO GLASS JARS AND PLASTIC BOXES

Handy for storing small hard-ware items to keep them clean and rust-free.



999 Glass Jar, 2 oz. size (Standard Package: 36).....



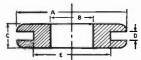
ELECTRONIC HARDWAR

IN PERMANENT Transparent PLASTIC P A C K E D IN HANDY STORAGE BOXES with SLIDING TOPS ECONOMICAL PLASTIC BAGS



WALSCO RUBBER GROMMETS

For protecting cables from abrasion when passing through chassis Also used for vibrationless mounting of parts.





					THE	40 LINE	THE 9	9 LINE
					\$0.40	List Ea. Pkg.	\$1.65 Li	st Ea. Pkg.
_		imensio				Approx. Quan.		
•	В	Ü	D _.	E.	No.	per pkg.	No.	per pkg.
2	1/8 3 16	18	1.6	1/4	†3341		3341-99	
6	19	32	1.6	16	†3342		3342-99	
6	1/4	1/4	1.6	3/8	†3343	10	3343-99	6.5
83	3/8	1/4	3,8	1/2	†3344		3344-99	
	1/2	32	16	5⁄8	†3345		3345-99	40
sso	rted				†3340	12		

WALSCO CHASSIS MOUNTS





Made of resilient synthetic rub-ber to give chassis or other components a floating effect and to reduce "microphonics." Es-sential wherever vibration will affect operation.

				THE	40 LINE	THE 99	9 LINE
				\$0.40	List Ea. Pkg.	\$1.65 Lis	t Ea. Pkg.
	—Din	nensions—		- Cat.	Quan.	Cat.	Quan.
A	В	С	D	No.	per pkg.	No.	per pkg.
3/4 "	1/2"	1/4 "	3%"	*2742	6	2742-99	30
1"	1/2 "	1/4 "	17"	*2744	4	2744-99	20
Assorted.				. †2740	10		

WALSCO RUBBER WASHER AND **BUMPER ASSORTMENT**

An assortment of the various kinds of rubber washers, bumpers, and spacers used in the electronic and radio industry for shockless, vibrationless mounting, for eliminating rattles and microphonics, etc. List Price Cat. No. +3440--20 Assorted Washers and Bumpers \$0.40

WALSCO CORD STRAINRELIEFS

FOR POSJ WIRE



U-36

Provides a grommet and strain relief in one piece. For use on appliance cord sets. Use WALSCO Rubber Cement (Cat. No. 112) for attaching to cord. Prevents insulation of wire from being damaged by sharp-edged holes in metal chassis or cabinets.

		List Price
Cat. No.		per pkg.
*3348-4	Strainreliefs	\$0.40

WALSCO CABINET FEET



Made of oil resistant synthetic rubber. Wood screws are supplied with screw-type feet but machine or selftapping screws may be used. The rubber tack feet have steel tacks securely molded in.

PKGS. OF SCREW-TYPE FEET, INDIVIDUAL SIZES

		THE 40		THE 99	
		\$0.40 List	Ea. Pkg.	\$1.65 List	Ea, Pkg.
Diam.	Height	Čat. No.	Quan.	Cat. No.	Quan.
3/8 "	32	*3351	12	3351-99	50
1/2 "		*3352	8	3352-99	50
3/4 "	3 ² 3⁄8	*3353	8	3353-99	30
.ssorted		†3350	12		

DUCK OF BURBER TACK FE

	PKGS. OF	KORREK	TACK	FEEI	
1½″ 3½″				3355-99 3356-99	50 50
Assorted		†3355	12	2200 22	

WALSCO SPADE BOLTS

Indispensable for attaching condensers, coils, cans, and similar items. For Experimenters, Servicemen and Manufacturers of electronic equipment. Stud size 6-32. Hole size for No. 6 screw.



	THE 40 \$0.40 List		THE 99 \$1.65 List	
Approx. Length	Cat. No.	Quan. per pkg.	Cat. No.	Quan. per pkg.
5/8 " 3/4 "			3271-99 3272-99	125 100
	†3270	25		

WALSCO RIVET ASSORTMENT

Various sizes of hollow, solid and split rivets in brass, copper and aluminum as used in everyday repair and experimental work. Sizes range approximately from $\frac{1}{16}$ " to $\frac{3}{16}$ " in diam. and up to $\frac{3}{4}$ " in length.



Cat. No. List Price per pkg. †2620—Approx. 60 asstd. Rivets.......\$0.40

WALSCO EYELET ASSORTMENT

Brass eyelets of various diameters and lengths. A handy item for every repair shop.

Cat. No. List Price per pkg. †2630—Approx. 55 Eyelets......\$0.40

WALSCO SMALL COTTER & HAIR PINS

Package contains an assortment of most popular sizes of cotter and hair pins. A valuable aid in the repair of radios and phonograph mechanisms.

List Price Cat. No. per pkg. *2650—Approx. 50 Assorted



WALSCO SPEAKER CONE PATCHES

A quick and inexpensive means for patching tears and holes in speaker cones. Made of specially flexible material and backed with an adhesive which forms a permanent bond with the cone.

†2553—10 Assorted Patches \$0.40

WALSCO SPEAKER DUST FELTS

Special, thin felt disks to keep metal particles and dust out of voice coils. Use Walsco Radio Cement to attach to cone.

Cat. No. List Price per pkg. 2775—Approx. 25 assorted sizes \$0.40



WALSCO ELECTRONIC

The M Line

The 1 Line

IN PERMANENT Transparent PLASTIC PACKEDIN HANDY STORAGE BOXES with SLIDING TOPS ECONOMICAL PLASTIC BAGS



WALSCO SNAP-HOLE PLUGS

A round, flat head, metal button with spring flanges that snap right into the hole. Used to seal adjustments, cover unused holes, etc.



unabou morob,				
	THE	40 LINE		99 LINE
	\$0.40 L	ist Ea. Pkg.		st Ea. Pkg.
Description	Cat. No.	Quan. per pkg.	Cat. No.	Quan. per pkg.
For ¼" hole	*3501	8	3501-99	50
For 3/8" hole	*3502	8	3502-99	50
For 1/2" hole	*3503	. 6	3503-99	40
For 5/8" hole	*3504	6	3504-99	30
For 3/4" hole	*3505	5	3505-99	25
For 1" hole	*3506	4	3506-99	20
Assorted	+3500	8		

WALSCO VENTILATING HOLE PLUGS

For amplifiers, transmitters, portable radios, amateur equipment, etc., wherever ventilation is required.



Cat. No. List Price per pkg. +3320—Assorted Plugs \$0.40

WALSCO CABLE CLAMPS





Heavy gauge steel, Cadmium plated, %" wide. Perfectly punched and formed with g holes. Available in 3 sizes

No. 6 or No. 8 mounting holes. Available in 3 sizes for cables from $\frac{1}{8}$ " to $\frac{5}{16}$ " in diameter.

	40 LINE st Ea. Pkg.		99 LINE stEa.Pkg.
For Cables Cat. No. 1/8" to 3" Diam. *3331	Quan. Per pkg. 20	Cat. No. 3331-99	Quan. per pkg,
78 to 16 Diam. *3331	18	3332-99	100
1/4" to 16" Diam. *3333	15	3333-99	75
Assorted †3330	20		

WALSCO GRID CAP ASSORTMENT

An assortment of Grid Caps for all standard metal and glass tubes. Made of high quality spring brass, or steel and plated.



WALSCO SPRING CONNECTOR CLIPS



(FAHNESTOCK TYPE)
For fast connection and good electrical contact. No tools required for connecting or disconnecting. Made of spring brass or phosphorbronze.

		40 LINE st Ea. Pkg.		99 LINE st Ea. Pkg.
For Wires	Cat. No.	Approx. Quan.	Cat. No.	Approx. Quan.
#16 gauge and smaller	*2731	20	2731-99	100
#12 to #18 gauge Assorted	*2732 *2730	12 12	2732-99	75

WALSCO FUSE CLIPS

Made of spring brass, nickel plated for single hole mounting.



.01 28-0		List Price
Cat. No.		per pkg.
	Assorted	Clips\$0.40

WALSCO TERMINAL LUGS

Available in the six popular sizes which meet most of the requirements of the radio and electronic field. Accurate forming facilitates easy handling. Made of tinned brass.



made of tillled brass.								
		99 LINE						
	\$0.40 Li:	st Ea. Pkg.	\$1.65 List Ea. Pkg.					
Figure No.	Cat. No.	Approx. Quan.	Cat. No.	Approx. Quan.				
1	*3281	30	3281-99	150				
2	*3282	25	3282-99	150				
3	*3283	25	3283-99	150				
4	*3284	25	3284-99	150				
5	*3285	25	3285-99	125				
6	*3286	40	3286-99	150				
Assorted	+3280	40						
Asst. Solderless								
Terminals	*3288	8						

WALSCO ANGLE BRACKET ASSORTMENT



Handy brackets of various lengths and shapes as needed by every repairman, experimenter, "ham", etc. Precision made, of steel, or brass and plated.

Cat. No.

*2610—Approximately 15 Assorted Brackets \$0.40

WALSCO TERMINAL STRIPS



For mounting parts which are to be insulated from chassis, and for wire distribution. Made with high-grade phenolic insulation. Solder-coated terminals.

WALSCO PHONO PLUGS AND JACKS



Standard plugs and jacks as used for connecting record players or pick-ups; also used on auto radio antennas. Used for all single conductor, shielded cable connections.

 Cat. No.
 List Price per pkg.

 †2580—Package of 4 Plugs
 \$0.40

 †2585—Package of 2 Jacks
 0.40

WALSCO PHONE TIPS



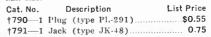
Fit all standard tip jacks. Easy to solder. Made of brass, nickel-plated. These are the conventional tips so often needed by both experimenters and service men.

THE 40 LINE THE 99 LINE
\$0.40 List Ea. Pkg. \$1.65 List Ea. Pkg.
Cat. No. Approx. Quan.
Phone Tips 12 2725 9 60

MINIATURE PLUG AND JACK

TWO-CONDUCTOR PRECISION TYPE

Ideal for hearing aids, speaker extensions, carbon microphones, and numerous other installations. Needs no screws; molded plastic case cements together. Illustration shown approximately one-half size.







The OD Line

IN PERMANENT Transparent PLASTIC P A CKED IN HANDY STORAGE BOXES with SLIDING TOPS ECONOMICAL PLASTIC BAGS



WALSCO METAL WASHERS

Precision steel washers, Cadmium plated, in standard small sizes for innumerable uses.



0000

\$0.40 List Ea. Pkg. \$1.65 List Ea.	2 Ln
30.40 List Ed. Fky. 91.05 List Ed.	ny.
For Screw ——Dimensions—— Cat. Approx. Cat. App	rox.
Size I.D. O.D. Thick. No. Quan. No. Qu	an.
#4 .125" 16" 15" 35" 3511 100 #6 .149" 36" 32" 3512 100 3512-99 50 #8 .175" 36" 3513 100 3513-99 50	
#6 .149" $\frac{3}{8}$ " $\frac{3}{3}$ " *3512 100 3512-99 50	0
#8 1.75" %" %" *3513 100 3513-99 50 #10 203" 15" %" *3514 75 3514-99 30 4" 265" ½" \$3" *3515 60 3515-99 30	0
#10 .203" $\frac{7}{16}$ " *3514 75 3514-99 30	0
$\frac{1}{4}$ " .265" $\frac{1}{2}$ " *3515 60 3515-99 30	0
Assorted +3510 80	

WALSCO LOCK WASHERS

Made of special steel and rustproofed. Sizes listed below are the most popular ones in the radio and electrical appliance field.

and ciccuitat appliance	IICIA.	_		
	The 40	LINE	THE 99	LINE
	\$0.40 List		\$1.65 List	
	Cat.	Approx.	Cat.	Approx.
For Screw Size	No.	Quan.	No.	Quan.
# 6	*3592	50	3592-99	300
# 8	*3593	45	3593-99	250
#10	*3594	40	3594-99	250
1/4 "			3595-99	200
3/8 "			3596-99	120
Assorted	†3590	50		

WALSCO KNOB FELT WASHERS

cabinets from being scratched and make knobs turn smoothly. Made of tough brown felt with ¼" hole to fit standard control and condenser shafts. O.D. is approx. 34" and thickness 32".



Felt Washers cellophane	in		40 LINE ist Ea. Pkg. Quan. per pkg. 45	\$1.65 Li	99 LINE st Ea. Pkg. Quan. per pkg. 250
cerropitatie	Dag	13430	10	3420-22	200

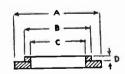
WALSCO MICA WASHERS AND SHIMS

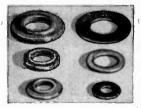
An assortment of flat and round shins and washers. Required by experimenters and for repairing of trimmers, soldering irons, heater elements, etc.

,	List Price
Cat. No.	per pkg.
*3428—Assorted	sizes\$0.40

WALSCO INSULATING WASHERS

Precision made of high-grade vulcanized fibre or phenolic material. Used on electronic and electrical equipment to insulate parts from chassis, etc.





Overall thickness of extruded washers is approximately and of the flat washers ...

In the "99 LINE," WALSCO Insulating Washers come in packages of either flat or extruded washers. In the "40 LINE" the packages contain both flat and extruded washers.

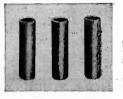
*		\$0.40 List Ea. Pkg.		\$1.65 Lis	\$1.65 List — Ea. Pkg. — \$1.65 List					
	— Dime	ensions -		Fits Screw	*	Quan. per pkg.		Quan.		Quan.
A	В	C	D	Size	Cat. No.	Flat & Extruded	Cat. No.	F!at	Cat. No.	Extruded
5	3.	.136	ī	#6	*3431	15 and 15	3431-F-99	250	3431-E-99	100
3/8	1/4	.165	32	# 8	*3432	15 and 15	3432-F-99	250	3432-E-99	100
	.308	.195	32	#10	*3433	15 and 15	3433-F-99	250	3433-E-99	100
3/8	.500	1/	33	#1/"	*3434	12 and 12	3434-F-99	200	3434-E-99	75
72	9.2	74	3,3	3/."	*3435	10 and 10	3535-F-99	200	3535-E-99	75
Ass	orted	78	33	78	†3430	15 and 15				

WALSCO SPRING (FRICTION) WASHERS



Used in record changers, automatic tuning assemblies, etc. Assortment contains many popular sizes of phosphor bronze and spring

				List Price
Cat. No.				per pkg.
†3425-Approx. 1	5 Assort	ed Spring	Washers	\$0.40



WALSCO **FUSE INSULATORS**

Standard fibre insulators for use on automobile radios. Two lengths included fit all standard $\frac{1}{4}$ " diameter fuses.

List Price

Cat. No.			per pkg.
†2690-Approx.	16	Assorted	
Insulators	3		\$0.40



WALSCO METAL AND INSULATING SPACERS

A popular assortment of spacers of various lengths, with hole size to accommodate #6 and #8 screws. Often used for mounting sockets, switches, and for raising panels, chassis, and condensers.

					List Price
Cat. No.					per pkg.
*2670—Approx.	12	Assorted	Insulating	Spacers	\$0.40
*2680 Approx.	12	Assorted	Metal Spac	ers	0.40

WALSCO SNAP-IN TRIMOUNTS





Faster than screws. Use them on modern radio sets. back covers, dial scales, chassis, built in antennae, etc., to speed assembly and repairs. THE 40 LINE

				ULINE	INE 99 LINE		
			\$0.40 List	ŁEa.Pkg.	\$1.65 List	Ea. Pkg.	
—Dimensio	ns—	For		Quan.		Quan.	
A B	C	Hole	Cat. No.	per pkg.	Cat. No.	per pkg.	
%" 5%" Assorted	9"	1/8"	*3462	20	3462-99	125	
3" 9""	76"	32"	*3464	18	3464-99	100	
3/8" 5/8"	16 " 3 2	1/8 "	*3465	15	3465-99	100	
Assorted			. †3460 ap	prox.20			

WALSCO RETAINING RINGS AND "C" WASHERS

A necessity in the servicing of volume controls, record changers, etc. The rings are tempered spring steel. The washers are annealed.



THE OR LINE

Cat. No.	Description	of units per pkg.	per pkg.
†3420-Asso	rted Rings & Washers		\$0.40
*3422—"C"	Washers for 1/4" Shaft	25	0.40
*3423"C"	Washers for 3" Shaft	25	0.40
THE 40 LINE		THE 99 LINE	



WALSCOPELECTRONIC NARE

The M Line

The 🐠 Line

IN PERMANENT Transparent PLASTIC PACKED IN HANDY STORAGE BOXES with SLIDING TOPS ECONOMICAL PLASTIC BAGS



WALSCO STEEL MACHINE SCREWS

Round head, cadmium-plated, steel machine screws. Available in assortments or individual sizes, conveniently packaged for experimenters, servicemen and amateurs.



WALSCO Standard Machine Screw Ass'tm't

All the standard sizes used in electronic and similar work are combined in this handy, inexpensive assortment. It contains Nos. 6, 8, 10 screws—¼ to 1" long.

	THE 40 \$0.40 List		THE 99 \$1.65 List	
Assorted Screws	Cat. No. †3560	Approx. Quan. 40	Cat. No. 3560-99	Approx. Quan. 200

WALSCO Small Machine Screw & Nut Ass'tm't

A special assortment of extra small screws (Nos. 2 and 4), and nuts so often needed in electronic and experimental work for fastening small parts, to replace rivets, etc.

Cat. Nc.		List Price
+3360—Approximately	30 Assorted Scre	ws and 30
Assorted Nuts,	per pkg	\$0.40

PACKAGES OF SCREWS - INDIVIDUAL SIZES

		THE 40	LINE	THE 99 LINE	
		\$0.40 List	Ea. Pkg.	\$1.65 List	Ea. Pkg.
			Approx.		Approx.
Size		Cat. No.	Quan.	Cat. No.	Quan.
#6-32 x 1/4"		†3100	40	3100-99	225
#6-32 x 3%"		†3110	35	3110-99	225
#6-32 x ½"		†3120	35	3120.99	200
#6-32 x 34"		*3130	. 30	3130-99	175
#6-32 x 1"				3132-99	150
#8-32 x 1/4"	*********	*3135	30	3135-99	200
#8-32 x 3%"		†3140	30	3140-99	175
440 00 1/ //		†3150	30	3150-99	160
440 00 2/1/		†3160	25	3160-99	140
# 8-32 x 1"				3162-99	125
#10-32 x ½"		*3165	20	3165-99	150
#10-32 x 34"		*3167	20	3167-99	125
# 10-32 x 1"		*3169	15	3169-99	100

WALSCO SMALL ESCUTCHEON AND WOOD SCREW ASSORTMENT



This assortment contains the extra small sizes of hard-to-get wood screws as needed by radio men, model builders, etc., for fastening name plates, escutcheons and numerous other devices.

Cat. No.						List Price
+3550Approx.	30	Assorted	Screws,	per	pkg.	\$0.40

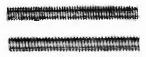
WALSCO Standard Wood Screw Assortment

Handy assortment for workshop or home. Contains round and flathead screws of popular sizes in brass and steel.



Cat. No. +3553—Approx. 30 Screws, per pkg..... List Price

WALSCO THREADED STEEL RODS



These rods have many uses in service and repair work and are made from the finest cold rolled steel to give maximum strength. Each package contains one each

of 6-32 and 8-32 threaded rod. Both 8 inches long.

Cat. No.

+2640—1 each 6-32 and 8-32 Threaded Rod..........\$0.40

WALSCO SHEET METAL AND SELF-TAPPING SCREWS

These screws cut their own threads in either metal or plastic. Just drill a hole and drive in the screw — no nut or tapping required. Ideal for mounting parts to chassis, replacing rivets and eyelets, etc.



٥.		THE 40 \$0.40 List	Ea. Pkg. Approx.	THE 99 \$1.65 List	Ea. Pkg. Approx.
Size		Cat. No.	Quan.	Cat. No.	Quan.
Assorted	******	†3470	30	3470.99	125
#6 x 1/4"		†2910	30	2910-99	150
#6 x %"		*2911	25	2911-99	150
#6 x ½"	**************	*2912	2.5	2912-99	150
#6 x 34"		*2914	20	2914-99	125
#6 x 1"		*2916	20	2916-99	100
#8 x 1/4"		*2919	25	2919-99	125
#8 x 3/8"		*2920	25	2920-99	125
#8 x ½"		*2922	20	2922-99	125
#8 x 34"		*2924	15	2924-99	100
#8 x 1"		*2926	15	2926-99	100
#10 x %"		*2930	20	2930-99	100
#10 x 1/2"		*2932	16	2932-99	100
#10 x 34"		*2934	15	2934-99	100
TT = 0 .1. /4		2004	13	4/ノマ・ブブ	100

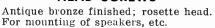
WALSCO RACK SCREWS & CUP WASHERS



For mounting panels in racks and cabinets, fastening record-players and recording chassis, etc. Enhances appearance of any assembly. The oval head screws are nickel plated—so are the cup washers.

Size	THE 40 \$0.40 List Cat. No.		THE 99 \$1.65 List Cat. No.	
#6-32 x 5%" Screws #8-82 x 5%" Screws #10-32 x 3%" Screws #6 Washers (7" O.D.) #8 Washers (10" O.D.) #10 Washers (10" O.D.) Asstd. Screws & Washers		30 25 20 50 40 25 12	3543-99 3541-99 3542-99 3544-99 3545-99 3546-99	175 125 100 300 250 200

WALSCO ORNAMENTAL HEAD SCREWS





	\$0.40 List		\$1.65 List	
Size	Cat. No.	Quan. per pkg.	Cat. No.	Quan. per pkg.
# 6-32 x 34" = 6-32 x 1" # 8-32 x 1 1/4" Assorted	*2952 *2953	20 20 12 15	2951-99 2952-99 2953-99	125 125 80

WALSCO STEEL SET SCREWS

Precision, hardened steel set screws in all popular sizes for radio knobs, record changers, home and automobile radios, or wherever set screws are needed.



			THE 99 LINE \$1.65 List Ea. Pkg.		
Size	Cat. No.	Approx. Quan.	Cat. No.	Approx. Quan.	
# 6-32 x ½" # 8-32 x ½" # 8-32 x ¼"	†3220	$\begin{array}{c} 12 \\ 12 \\ 12 \end{array}$	3220-99	75	
#10-32 x ¼" Assorted	*3237	12 15 :	3480-99	75	



99 Line

The 10 Line

IN PERMANENT Transparent PLASTIC PACKED IN HANDY STORAGE BOXES with SLIDING TOPS ECONOMICAL PLASTIC BAGS



WALSCO MACHINE SCREW NUTS



Walsco nuts are "Small Pattern" as preferred in the electronic and electric trade. Precision made and plated.

Assorted	†3520	35			3520-99	175
#10-32	*3195	25	3195-B-99	100	3195-99	175
#8-32	†3190	30	3190-B-99	125	3190-99	200
# 6-32		35	3180-B-99		3180-99	200
# 4-40					3175-99	200
Size	Cat. No.	Quan.	Cat. No.	Quan.	Cat. No.	Quan.
	Steel. Cadm. Pl.	Apprx.	Brass, Nickel	PI. Apprx.	Steel, Cadm. Pl.	
	\$0.40 List Ea					
	THE 40 L		THE 99 LINE			

WALSCO SPECIAL MOUNTING NUTS



Various kinds of nuts used on volume controls, switches, jacks, potentiometers, etc. A "must" for every radioman and electrician. All nuts are cadmium or nickel plated.

No. of Concession, Name of Street, Name of Str				
	THE	40 LINE	THE S	99 LINE
		List Ea. Pkg.		
Description	Cat. No.	Apprx. Quan.		
3/8" x 32 Vol. Control Hex Nut		12	3531-99	
18" x 32 Toggle Switch Hex Nut.	*3532	10	3532-99	
18" x 32 Toggle Switch Ring Nut.	*3533	8	3533-99	50
Assorted	†3530	15		



WALSCO ACORN NUTS Greatly improves the appear-

ance on panel assemblies, test instruments, cabinets, These PAL type steel nuts

are	self-locking	and	bright	cadmium	plated.
Cat.	No.				List per pkg.
*296	60-12 Assort	ed N	uts		\$0.40

WALSCO KNURLED THUMB NUTS

	4	Precision-made, E	Brass Nuts	List Price per pkg.
	Minimo	*2971—Арргох.	12 Nuts,	6-32 \$0.40 8-32 0.40
_				10-32 0.40



10 Nuts.

Cat. No. *2975-

Handy for experimental work and hobby per pkg. \$0.40 0.40 0.40

craft. Made of Steel and plated.

WALSCO WING NUTS

WALSCO SPEED NUTS Self-locking and easy to install. Often required for replacement on many record changers, tun-

					List Price
Cat. No.					per pkg.
*2980-Approx.	30	Assorted	Speed	Nuts	\$0.40

ing units, etc.

TWIN-LEAD WIRING NAILS



Designed for attaching 300-ohm leads walls, moldings, etc. Ornamental head greatly improves the appear-ance of the installation. WALSCO nails have no appreciable effect on the impedance of the line as the heads consist almost entirely of in-

heads consist autorial.

sulating material.

THE 40 LINE
\$0.40 List Ea. Pkg.
\$1.65 List Ea. Pkg.
Cat. No. Apprx. Quan.
Cat. No. Apprx. Quan.
2552-99 200

WALSCO Wiring Nails

WALSCO DIAL **DRIVE SPRINGS**

Made of fine music wire for greater flexibility. Available in all standard sizes. Carefully looped at each end, rustproofed and cadmium plated.

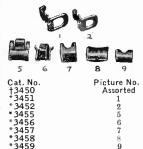
Illustration Approximately	two-thirds actual size	
	THE 40 LINE	THE 99 LINE
	\$0.40 List Ea. Pkg.	\$1.65 List Ea. Pkg.
Springs	Cat. No. Qun. per pkg.	
Assorted (Large and Small)	3400 . 10	3400-99 50
Assorted Small Springs	3410 10	

LARGE

SPRINGS

		-Dimensio	ns——		No. of	
Cat.	Overall Length	Diam.	Wire Thickness	Picture Number	springs per pkg.	List Price
3411	1/2 "	1/6 "	.016"	1	10	\$0.40
3412	5/8 "	1/8 " 5 3 2 "	.018"	2	10	0.40
3413	<u>'9</u> "	3 "	.020"	3	10	0.40
3414	3/4"	1/6 "	.016"	4	8	0.40
3415	3/1 "	′§.″	.020"	5	8	0.40

WALSCO RADIO KNOB SPRINGS



SMALL SPRINGS

The modern method of fastening knobs to shafts. Available in all regular sizes and shapes. The assortment is complete and most useful to radio sliops. Finest grade of selected steel is used.

5	6	7	8	9	Approx. No. of	List
at. N	n.		Pict	ure No.	Springs per pkg.	per pkg.
3450				sorted	16	\$0.40
3451			• • • •	1	10	0.40
3452				2	10	0.40
3455				5	15	0.40
3456				6	15	0.40
3457	,			7	20	0.40
3458	5			8	20	0.40
3459)			9	20	0.40
			(Bull	k Price	s Upon Request)	

WALSCO EXPANSION SPRINGS



Very handy for radio and electrical shops, laboratories, etc. The assortments contain various sizes of springs for many applications: record changers-to name one of a thousand.

Cat. No.			List pe	
+3290-10	Assorted	Large	Springs	0.40
+3390-10	Assorted	Small	Springs	0.40

WALSCO COMPRESSION SPRINGS



A hard-to-get item. The Walsco assortments contain all of the springs often needed for repair work on radio and electronic equipment, motors, appliances, etc. Available in two assortments.

Cat. No.			List per	
+3370-20	Assorted	Small	Springs	60.40
†338015	Assorted	Large	Springs	0.40

WALSCO ESCUTCHEON PIN ASSORTMENT



Brass finished pins in various sizes and lengths from $\frac{1}{4}$ " to 1".

List per pkg +3555—Approx. 100 Asstd. Pins. \$0.40



CEMENTS—SOLVENTS COIL DOPE—IMPRECONE

BEVERLY HILLS, CALIFORNIA

WALSCO RADIO CEMENT

Vibration-Proof Heat Resisting Unsurpassed Adhesive Power

An elastic cement especially made for the manufacture and repairing of speakers and for general radio work. Unaffected by vibration, dries fast and will never become brittle with age. . The latest developments in synthetic resins and gums are incorporated in Walsco Radio Cement.

• In addition to its use for speaker repair. Walsco Radio Cement can be used for repairing cabinets, loose tube bases, grid caps, etc. It will provide a strong bond between almost any materials and is not

affected by high temperature, moisture or oil. All bottles come with built-in brush and have an evaporation-proof cap liner.





	Cat. No.	List Price
	51—1¾ oz. tube	\$0.55
	52-2 oz. bottle	0.60
LSCO T	54—4 oz. bottle	1.10
DIO	58-8 oz. bottle	1.75
	59—1 pt. bottle	3.30
	50-GL-1 gal. can	12,50
	Also available in 5, 15, 50 gal.	containers.

WALSCO PLASTIC CEMENT

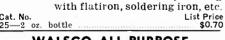
Especially made to repair broken plastic cabinets, knobs, etc. Waterproof, heat-resisting, and heavier in substance than Walsco Radio Cement. Unexcelled as "Household Cement," "Model Airplane etc. Cements Plastics, Metal. Cement," Wood, Glass, etc. Dries fast and forms an

exceedingly strong bond.	
Cat. No.	List Price
41—1¾ oz. tube	\$0.55
42—2 oz. bottle	0.60
44-4 oz. bottle	1.10
48-8 oz. bottle	1.75



WALSCO VINYLITE CEMENT

This adhesive uses the new Vinylite plastic resin as a base and has remarkable properties such as high tackiness, extreme flexibility when dry and excellent adhesion to metals, plastics, leather, cardboard and paper. Fast drying. Also an excellent thermoplastic cement for joining nonporous materials (e.g. metals). In this case the cement is applied to both surfaces and dried after which the parts are pressed together and bond established by heating



WALSCO ALL-PURPOSE RUBBER CEMENT

For cementing rubber parts to metal or wood, rubber mounts to chassis, rubber cushions to lids, etc.—gives an especially strong bond. A Radio Serviceman should always have a bottle on his work bench. Cat. No. List Price 112-2 oz. bottle\$0.60 114—4 oz. hottle.....



WALSCO FABRIC CEMENT Does Not Penetrate the Fabric

Especially made for attaching grille cloth. turntable felt, covering of portable radios, etc. Dries very fast; is unaffected by moisture, sunlight, and high temperature and does not become brittle. Indispensable to Radio Dealers and Servicemen-eliminates the danger of spoiling the outside of a grille cloth, turntable felt, or other fabrics, since it does not penetrate the material. Cat. No. 21—134 oz. tube...





WALSED

--**O**

An "extra strength" adhesive incorporating the latest chemical developments and resins. A "must" item for every repair shop. Bottle caps have non-

sticking rubber gaskets. List Price Cat No. .\$0.60 1.00

WALSCO **CEMENT SOLVENT** AND THINNER

This Cement-Solvent is used for loosening cement on speaker cones, voice coils, and other parts where cement has been applied previously. Recommended also for thinning Walsco Radio Cement, Plastic Cement and Fabric Cement.

Centent, and Papric Centent.	
Cat. No.	List Price
62-2 oz. bottle	\$0.50
64-4 oz. bottle	
68—8 oz. bottle	0.90
69—1 pt. bottle	1.40





WALSEN - CD-

WALSCO POLYSTYRENE CEMENT AND COIL DOPE

For Bonding Polystyrene Parts and Coil Coating in Radio and High Frequency Work A Polystyrene solution with a high solid content. Can be brushed on or parts can be dipped. Renders coils or other parts moisture-proof. Holds windings firmly in place due to a certain amount of shrinkage upon drying. Electrical losses due to coating with this cement are negligibleeven if used for high or ultra-high frequency work.

Cat. No.			List Price
154—4 oz.	bottle	 	\$1.00
			Request

WALSCO Polystyrene Solvent and Thinner

This thinner is especially designed for use with Walsco Polystyrene Coment where regular thinner can-Cat. No. be used. 164-4 oz. bottle....



WALSCO IMPRECONE

An impregnating fluid which will render speaker cones moisture-repellent and impervious to fungus and mildew. Also prevents the drying out of cones under heat or adverse climatic conditions. Restores brittle cones to original texture. Developed for use in drive-in theatre installations, on outdoor speakers, car radios, etc.

Cat. No.	List Price
98 —8 oz. hottle	\$ 1.60
98-GL-1 gal. can	17.50

For Bulk Quantity Prices on these items, see WALSCO INDUSTRIAL AND BULK PRICE LIST, pages U-47 to U-50.

List Price

products ALTER L. SCHOTT COMPANY,

CLEANERS — LUBRICANTS "CONTACTENE"—"NO SLIP"

BEVERALY HILLS, CALIFORNIA

WALSCOLUB - B

A recently-developed chemical compound in thin paste form. WALSCOLUB - B counteracts oxidation, prevents corrosion of metals and eliminates noise on band switches, push buttons, tuners, volume and other controls, as well as airexposed electrical contacts, attenuators, etc. WALSCOLUB-B will not change electrical properties. It is superior to any graphite compound for this purpose. Ideal on metal surfaces to prevent rust. Servicemen: Its use will save you both time and money. Once you have tried it, you will never be without it! Large, handy applicator tube.

Available also in 1-lb., 5-lb. and 25-lb. containers for industrial users. Prices on request.

Cat. No. List Price 22—1¾ oz. tube \$0.55

WALSCO

WALSCO CONTACTENE

New Improved "Contact Cleaning Fluid"

- Cleans contacts and controls.
- Keeps controls and contacts noise-free.
- Lubricates and reduces friction.

A fast-evaporating combination of special solvents affording greatest cleaning power without affecting insulating materials. Contains "No-Ox," which after evaporation of the solvents, forms a thin film that protects the contacts. Contactene is recommended for treating volume controls, band switches, tuning condensers, springs, etc., to eliminate noisy operation. Bottles come with built-in brushes.



Cat. No. 82-2 oz.	bottle	ist Price
84—4 oz.	bottle	0.75
88—8 oz.	bottle	1.00
89—1 pt.	bottle	1.80

WALSCO Motor and Gear Lubricant

The latest development in chemicals for lubricating purposes. Much superior to greases because of its higher lubricating and lasting qualities. Its viscosity does not change with temperature. Used on phonograph motors, record changers, and all appliances that require a grease-type lubricant. In large handy "applicator" tube. Cat. No. List Price 23-134 oz. tube

WALSCO "NO-SLIP"

A newly developed chemical composition that greatly increases the friction of pulleys, cords or belts. Contracts, "sets" and shrinks the fibres at the same time. Stops instantly any slippage of Dial Belts, Dial Cords, etc. Easily applied with brush. Indispensable to any radio man.

Cat. No.		List	Price
401-1/2	oz. boti	tle	\$0.45
402 2	oz. bot	tle	0.75



WALSCO "NO-OX"*

"The Miracle Electronic Contact Fluid"

Fast-acting liquid chemical formulated with a neutral, non-gumming special lubricating base. The answer to the radioman's need for an outstanding contact and control cleaner. Contains no solvents; its corrosion-dissolving action is entirely chemical. Cleans, lubricates and preserves. Proved in tens of thousands of applications by radio laboratories,

service shops, broadcasting companies, motion picture, sound and recording studios, etc. "NO-OX" is highly recommended for treatment of volume and tone controls, attenuators, mixers, relay contacts and similar equipment.

Cat. No.	List Price
101—1 oz. bottle	\$0.85
102—2 oz. hottle	1.60
100-16—1 pt. bottle	12.50
* Mfd. under exclusive licensing agreement with NO-OX	Laboratories.
Trade mark registered.	

WALSCOFLUX

A non-corrosive flux. Quick acting, easy to apply. May be safely used for all electrical, radio and telephone work. Helps to keep the iron tip clean. Cat. No. List Price 220-2 oz. bottle with applicator..... \$0.60

WALSCO SOLDERING PASTE

A high - quality paste, fast acting and safe for most electrical and electronic uses.

List Price Cat. No. 221 -2 oz. can \$0.30

221-D-Display of 24 No. 221..... 7.20



WALSCO CARBON TETRACHLORIDE

For general cleaning and spot removing. Dissolves dirt and grease instantly. May be used on most delicate parts. Chemically pure, rapid drying, non-explosive and non-inflammable. A safe cleaning fluid. List Price

4 oz. bottle..... 219 —16 oz. bottle....... 214GL—1 gal. can..... 1.65

WALSED

ALSCOFLUX

Cat. No. 228

WALSCO RADIO DIAL OIL

A light-bodied lubricating oil for all electronic and electrical appliances - absolutely free of acids or gummy sub-

stances. Also recommended as a rust preventive for radio chassis, tools, machinery, etc.

Cat. No.

WALSCO CONTACTENE **INJECTOR**

For applying WALSCO Contactene, NO-OX, Dial Oil, etc., to spots which are not accessible with ordinary applicators. "Injector Needle" will permit application of contact chemicals to most volume controls without unsoldering connections or taking control apart.

This tool is made with a highest quality surgicalgrade needle, and an oil-resistant rubber bulb.

Cat. No.	List Price
989 -Contactene Injector	\$0.75
989 D-Display of 12 No. 9	



List Price

\$0.45

0.60

For Bulk Quantity Prices on these items, see WALSCO INDUSTRIAL AND BULK PRICE LIST, pages U-47 to U-50.

\$0.55

POLISHES, PAINTS, LACQUERS SPECIAL CHEMICAL

BEVERLY HILLS, CALIFORNIA

WALSCO SCRATCH REMOVING POLISH

"Makes Scratches Disappear"

A blend of polishing and staining ingredients. Removes scratches from cabinets, radios, furniture, etc., and polishes at the same time. Very easy to apply. Will not change shade of finish. Comes in two shades: "Dark" for walnut, mahogany, etc., "Light" for light maple, light oak, etc.

Cat	. No.		
	Light		List Price
414	434	4 oz. bottle 8 oz. bottle	\$0.50
Standa	пи Раск	age: 4 oz. bottles 8 oz. bottles	



WALSCO SUPER POLISH

"A Concentrated White Cream Wax Polish"

Does two things: First, it removes any old polish, grease or dirt that may be on the cabinet or furniture. Second, it forms a hard, dry and durable film that will protect the object for a long time, giving it a "brand new" appearance. Requires very little rubbing.

Cat. No.				List Price
412-4	oz, bottle	 		\$0.50
		4 oz.	bottles 1 bottles 2	doz.

WALSCOCLEAR (Formula 91)

A scientific preparation for cleaning plastics such as television filters, lenses, optical systems, vinyl and LP records, etc.

WALSCOCLEAR contains a new chemical discovery that counteracts the dust-attracting electrostatic effect which usually interferes with proper polishing of plastic articles.

WALSCOCLEAR is very easy to apply, gives a wonderful polish, and is absolutely harmless to all plastics.

Cat. N	lo.			List	Price
					\$0.50
91D-	-Disp	lav of	12	bottles	
	of ?	√o. 91	l		6.00



WALSCO RECORDGRIP

Positively stops slipping of phonograph records on changers. Indispensable for new plastic light-weight and vinyl records, to assure uniform speed and undistorted reproduction. "Recordgrip" is transparent and easily applied to the records by marking an "X" on the record label on each side. Application is permanent and one stick is sufficient for several dozen records.

Cat. No. List Price
405 — Recordgrip Stick \$ 0.50
405-D—Display of 20 No. 405 Sticks 10.00



WALSCO INSECTENE

A new WALSCO development to control insects such as spiders, beetles and roaches, often found in juke boxes, radio cabinets, and amplifiers. Will kill insects on contact, and provides a coating with long-lasting repellent action. WALSCO Insectene is best applied to cabinets and chassis with a brush or regular insecticide spray gun. Harmless to wiring and parts.

Cat. No.	List Price
448 —8 oz. bottle	\$ 1.10
448GL—1 gal. can	12.50



WALSCO AIR-DRY WRINKLE VARNISH

Easy to apply in one coat. WALSCO Air-Dry Wrinkle Varnish provides a film that is hard, tough, and very resistant to wear. Repairs and replaces original wrinkle finish of manufactured equipment. No baking required. WALSCO Wrinkle Varnish will airdry at room temperature.

Standard colors: grey and black. Other colors upon request.

Cat. No.
45-2 oz. jar (specify color)
47-16 oz. can (specify color).



List Price\$0.60

WALSCO CRYSTALLIZING LACQUER

Easily applied to metal, wood, cardboard, etc.—does not require experience. No spraying equipment or baking oven necessary. Brushed on, will dry in about thirty minutes, leaving an absolutely professional finish. Identical to finish found on

finish. Identical to finish found on commercial chassis, panels, speakers and transformers. Walsco Lacquer Sealer, Cat. No. 142, should be used as undercoat if this lacquer is to be applied on porous materials or over other finishes. Available colors: Black, Green, Grey, Brown, Clear. Specify color when ordering. Cat. No.

List Price

Cat. No.	-ist Price
122-2 oz. jar	\$0.
129—16 oz. can	3.00
142—Sealer, 2 oz. jar	0.50



WALSCO SATIN FINISH LACQUER (TELEPHONE)

Made for commercial and amateur use on cabinets, chassis, panels, meters, racks, etc. This "satin finish" lacquer dries very fast and produces the "original finish" of most standard telephone and communication equipment. It air dries. May be brushed or sprayed.

Cat.	No.		
Black	Grey	List	Price
172	182	2 oz. jar \$	0.60
179	189	1 pt. can	



WALSED

WALSCO INSULATING VARNISH

Walsco "air-dry" varnish is fast-drying and produces excellent results when used on radio coils, transformers, solenoids, motors, and all electrical appliances. Withstands heat and is extremely resistant to acid, oil, and grease. It is non-corrosive and moisture-proof. An all-around clear insulating varnish. Cat. No.

ly resistant to acid, oil, and grease. It	
is non-corrosive and moisture-proof.	
An all-around clear insulating varnish.	
Cat. No.	List Price
192—2 oz. bottle	\$0.60
193—1 pt. can	2.00
194—1 gal. can	

WALSCO LIGHT BULB COLORING

A transparent, heat and moisture-resisting dipping lacquer especially made for coloring bulbs such as used in radio dials, signal systems, auto dash lights, and fancy illumination. Big jars permit dipping of even larger bulbs.

Cat.	No. 1	_ist Price
116	Red—2 oz. jar	\$0.60
117	Blue—2 oz. jar	0.60
118	Green-2 oz. jar	0.60
119	Assorted—Kit of 3	1.60





REFINISHING and REPAIR KITS

BEVERLY HILLS, CALIFORNIA

WALSCO RADIO CABINET PATCHING OUTFIT



A complete kit especially designed for radio men who have little experience in cabinet work. Over 95% of all cabinet-finish damages can be repaired with this kit. The kit contains two shades of Spirit Walnut Stain, Dark Brown Lacquer, Plastic Wood, two shades of Ivory Spirit Enamel, Patching Lacquer, Super Polish, Alcohol, Brushes, Garnet Finishing Paper, French Polishing Pad, and Steel Wool, together with complete Instruction Booklet.

List Dealer's Net 6.50 \$3.90 .7.50 4.50 K-10—In sturdy bex with hinged lid... \$6.50
K-10-W—In California redwood case. 7.50

WALSCO RADIO CABINET REPAIR KIT

A very handy com-pact and inexpensive kit that fills the rekit that fills the re-quirements of many shops and stores. Es-pecially useful for the Dealer or Serviceman who has only occa-sional cabinet repairs. The kit contains one bottle each of the fol-



Dowing: Ivory Spirit Enamel—light and dark; Lacquer Enamel—Dark Brown; Spirit Stain; Super Polish; French Varnish; Finishing Paper; Steel Wool; Polishing Cloth; Instruction Booklet.

Cat. No. K-9 ...

Dealer's Net List \$3.00 \$1.80

WALSCO STICK SHELLAC KIT



An inexpensive kit for service-

Alcohol and Instructions.

List Dealer's Net Cat. No. \$3.50 \$2.10

REFILLS OF POPULAR REFINISHING MATERIALS AS CONTAINED IN ABOVE KITS

MAILKINES AS CONTINUES IN THE	
Cat. No.	List Price
Stains	00.20
287—Spirit Stain, 2 oz	\$0.30
(Walnut, Mahogany, Maple, Black)	
Agg Uninit Stain 8 07	1.40
289—Blending Stain (Lt. Brown, Med. Brown)	0.75
Patching Lacquer (Improved French Varnishing	Materials)
290—4 oz. bottle	1.20
291—16 oz. bottle	3.50
Stick Shellac Rubbing Fluid	~-
295—4 oz. bottle	
296—16 oz. bottle	1.75
Stick Shellac	
299—Set of 8 assorted colors	1.50

WALSCO "SUPER-CHIEF" REFINISHING KIT



This is the most complete kit of its kind on the market. Designed by Walsco for radio dealers. It contains everything which is needed to make an old radio look like new-all handy in one box-type carrying case. Contents of kit can be used by either skilled or unskilled refinishers, to completely refinish old radios and trade-ins, or to quickly patch up scratches, mars, etc. This kit will pay for itself on the first or second job. Every first-class radio dealer should have one. Kit contains the following:

Spirit Stain Dark Walnut Spirit Stain Black Spirit Stain Mahogany Spirit Stain Maple Super Polish Spirit Stain Light Walnut Blending Stain Light Brown Blending Stain Medium Brown Lacquer Enamel Light Ivory Lacquer Enamel Dark Brown Lacquer Enamel Dark Ivory Shellce Rubbing Fluid Stick Shellac (8 asstd. shades) Scratch Removing Polish (Dark) Scratch Removing Polish (Light) Patching Lacquer Alcohol Lamp Spatula Felt Polishing Cloth Polishing Pad
Garnet Paper (8 sheets)
Instruction Book Brushes (3 different sizes)

List Dealer's Net K-26 \$18.50 \$11.10

WALSCO FÜRNITURE REFINISHING KIT

Ideal for touch-up work on radios, furniture, pianos, etc. Scratches, mars, dents, broken edges can be repaired quickly. Contains: Super Polish, Patching



Lacquer, Alcohol, Spirit Stains in Walnut, Mahogany, Maple and Black; Shellac Rubbing Fluid, Plastic Wood, six colors Stick Shellac, Alcohol Lamp, Spatula, Brushes, Garnet Finishing Paper, Complete Instruction Book. Kit furnished in California Redwood case with hinged lid.

List Dealer's Net Cat. No. .\$8.00 \$4.80

WALSCO PHONO TURNTABLE FELTS

Made of high-quality brown felt, accurately die-cut with concentric center hole. Use WALSCO Radio Cement or WALSCO Fabric Cement for at-



taching.	
Cat. No.	List Price
350-8 — 7%" diameter	\$0.45
350-9 - 8%" diameter	0.60
350-10- 9%" diameter	0.65
350-12-11%" diameter	0.75



INSULATING TUBING FLOCK FINISH - DIAL CRYSTALS

BEVERLY HILLS, CALIFORNIA

WALSCO FLOCK FINISH SPRAY KIT

For flock finishing of radio cabinets, speaker grilles, interior of record and other cabinets, turntables, jewelry and gift boxes, toys, novelties and many automotive and hobby uses. This original WALSCO Flock Kit is very easy to use and requires no skill - anyone can obtain expert results. Contains everything to produce a colorful, velvet-like and durable flock finish. The kit includes patented felt flock spray gun, ivory and brown telt flock, undercoats to match, thinner, brushes and complete instructions.

Cat. No. K-50-Complete Flocking Kit

.....List Price, \$11.90

WALSCO FELT FLOCK MATERIALS

Felt Flock

Made of precision cut, lustrous rayon. Packed in 3 ¼ oz. containers (covers 7 to 10 square feet). List Price.................\$1.65

Cat. No.	Color	Cat. No.	Color
470	Brown	475	Green
471	lvory	476	Silver
472	Blue	477	White
473	Taupe	478	Black
474	Red		Canary
474-1	Maroon		Cumary

List Price Flock per pound (specify color). \$5.50

Flock Undercoat

Provides proper adhesive and color base for felt flock. Packaged in halfpint cans (covers 10-15 square feet of non-prorous surface). List Price.....\$1.65

480 Brown 484-1 Marc	n
481 Ivory 485 Gree	r-White

List Price Undercoat per gal (specify color)



For thinning of Undercoat, if necessary, and washing out brushes. Cat. No. -Half-pint can 468-\$0.55

Felt Flock Spray Gun Same as contained in WALSCO Flock Finish Spray Kit. Cat. No.

List Price \$4.35 WALSCO

INSULATING CAMBRIC

High-voltage (5000-v.) insulating material for repairing transformers, field coils, solenoids, relays, etc. Yellow color; very flexible and durable.

645 —Roll of approx. 210 sq. in....... \$0.75 645-D—Display of 10 No. 645 rolls.... 7.50

WALSCO

STROBOSCOPE DISK

List Price

List Price

.....\$0.15

WALSCO INSULATING WALSCO RAYOFLEX

A new type "spaghetti tubing" made of heavily lacquered rayon braid. More flexible and superior in many other respects to the conventional varnished tubing. Good dielectric strength (4,000 to 5,009 volts). RAYOFLEX has a smooth and tough surface inside and out. Meets ASTM and VTA Specifications #B2. Sizes up to #6 are packed in handy boxes.

			a, bonco.		
Cat. No. 630 631 632 633 634 635 636	Size B & S Gauge No. 18 15 12 9 6 2 0	Approinch .042 .059 .085 .118 .166 14"	x Quantity per pkg.* 10 ft. 10 ft. 8 ft. 5 ft. 5 ft. 30 in. 30 in.	List Price per pkg. \$0.95 0.95 0.95 0.95 0.95	
637 638	0000	3/8" 1/2"	30 in. 30 in. 30 in.	0.65 0.69 1.15	

*For larger quantities, write for quotation. Available in: Black, Blue, Red, Yellow. Please specify color when ordering.

TUBING (SPAGHETTI) WALSCO FLEXITUBE

A high-grade synthetic extruded vinylite tubing for electronic and electrical insulation. Extremely flexible and resistant to abrasion. High dielectric strength (average 12,000-volt). Resistant to cold or heat from minus 65°F to plus 185°F. (Minus 54°C to 85°C). This tubing is impervious to water, oil, alcohol and most acids and alkalies.

List	Price, per pk	a		\$0.95
Cat.	Size B & S	Appr	ox. I.D.	Quantity
No.	Gauge No.	inch	mm	per pkg.*
600	18	.042	I	20 ft.
601	16	.053	1.4	20 ft.
602	14	.066	1.6	18 ft.
603	12	.085	2	16 ft.
604	10	.106	2.7	14 ft.
605	8	.133	3.5	12 ft.
606	6	.166	4	10 ft.
607	4	.208	5	6 ft.
608	2	.263		6 ft.
*For	larger quant	ities,	write for	quotation.

HANDY ASSORTMENTS



RAYOFLEY

List Price Cat. No.

C40—12 ft. of Assorted sizes and colors, from

size 18 to 9

640-D—36 Assortmts, of #640 in Display Box 32.40

641—6 ft. of Assorted sizes and colors, from

size 9 to ½"

0.90 641-D-24 Assortmts. of #641 in Display Box 21.60

Cat. No. FLEXITUBE

620—20 ft, of Assorted sizes and colors, from size 18 to 10. \$ 0.90 620.D—36 Assortments of #620 in one Display Box... 32.40 621—12 ft. of Assorted sizes and colors, from size 10 to 2 0.90 621-D—24 Assortments of #621 in one Display Box... 21.60

lable in: Black, Green, Red, (Please specify color when ordering. Available in: Black,

to be stationary on correct speed when observed under 60-cycle AC lighting (preferably fluorescent). For checking 78, 45, and 33 1/2 rpm. speeds Cat. No.

Clear.

Cat. No.

WALSCO PLASTIC DIAL CRYSTALS

Standard Packing: 25

Can be cut with seissors. Easily press-fitted or cemented in place. Solves the replacement problem on radio dials. instruments, etc.

For checking proper speed of turntables times on dist

949-Stroboscope Disk ...



Cat.		deres .	THE PARTY NAMED IN
No.	Size		List Price
990-6"	Maximum	Diameter	\$1.10
992 —9"	Maximum	Diameter	1.80
994-8"	x 10" Fla	t Sheet	1.65

ULTRA-FLEXIBLE MINIATURE WIRES



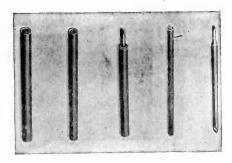
For all connections in electronic devices requiring special thin and flexible leads such as phono pick-ups, miniature earphones, relays, etc. All wires, except tinsel, are 30-gauge, stranded.

Cat. No.	Price
304 —Single-conductor, shielded, for nick-up leads, etc. 25.ft speci	01 75
3040—Same as No. 304, but package of 54" length	0.40
303 —Single-conductor, shielded, with black cofton overbraid 25-ft appel	2 40
Same as No. 305, but package of 48" length	0.40
— Two conductors, parallel, color-coded, shielded, 25-ft spool	2 70
—I we conductors, timed, twisted, with flesh-colored plastic insulation. Designed for	
headphones, hearing aids, etc., 25-ft. spool	3.60

SPECIAL TOOLS

BEVER WY HILLS, CALIFORNIA

WALSCO ALIGNMENT



WALSCO 1/4" HEX I. D. NEUTRALIZING WRENCH. Very durable. Can be cut if corners become rounded from wear. Overall length—7½", O.D.—¾" round. List Price Picture No. \$0.40 §2500—Bone Fibre Wrench §2503—Polystyrene Wrench 2

WALSCO 5/16" HEX. I. D. NEUTRALIZING WRENCH.

Same construction as $\frac{1}{4}$ " wrench listed above. Over-all length— $7\frac{1}{2}$ ", O. D.— $\frac{1}{3}$ ". 7 ½", O. D. — ½". Cat. No. §2505—Bone Fibre Wrench §2508—Polystyrene Wrench List Price Picture No. 1 0.40

WALSCO FIBRE HEX-WRENCH-AND-SCREW-DRIVER.
Standard 1/4" hex wrench combined with a fibre screw driver. Picture No. Cat. No. °2510—Combination Tool \$0.60

WALSCO DUPLEX ALIGNMENT SCREWDRIVER.

Precision made. Ground or molded to fit large or small screws. Width of blade on large end—¼"; on small end—½". Thickness to conform to standard slot dimensions. Over-all length—6".

Cat. No.

°2520—Fibre Screwdriver

°2521—Polystyrene Screwdriver Picture No. \$0.50 0.40 5 5

WALSCO METAL TIP ALIGNMENT SCREWDRIVER. Polystyrene handle. This tool combines the low capacity effect of an alignment tool with the mechanical strength of a metal screwdriver. Diameter—¼"; over-all length—6".

List Price Cat. No. *2525—Alignment Screwdriver Picture No.

WALSCO TUNING WAND.

Made from Polystyrene rod with inductance-increasing powdered iron core on one end and inductance-reducing brass piece on opposite end. Over-all length-6".

Cat. No. °2540—Tuning Wand List Price \$0.50 (Picture not shown, but similar to Picture #1.)

WALSCO TY-FM ALIGNMENT TOOL KIT.

Complete set of all tools required for receiver alignment. Cat. No. 580-12 tools in leatherette case. List Price \$11.50 11.50 581-12 tools on wall rack.....

WALSCO TIRE STATIC NEUTRALIZING KIT

 Reduces or Eliminates Automobile Radio Tire Static.

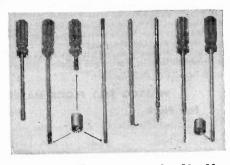
 Dissipates Body Contact Shock (Door-handle

Sparks).

U-46

This kit contains a special injector gun and 5 packages of WALSCO Static Neutralizing Powder (one for each tire, including spare). The powder is blown into each tire in a very simple operation, which takes just a few minutes and lasts for the life of the tire.

List Price Cat. No. List Price 980—Tire Static Neutralizing Kit, complete with injector, powder and instructions. \$2.50 982—Injector gun only. 1.50 985—Powder only (enough for 5 passenger-car tires) 1.00



12 10 11

WALSCO TV OSCILLATOR ALIGNMENT TOOLS.

Cat. No.

2518—For Philco Receivers

2522—For Receivers, "Standard Coil"

Front Ends

ALIGNMENT List Price Picture No. \$1.60 6 1.00 12

WALSCO TV I.F. ALIGNMENT SCREWDRIVERS. Standard Tools for all TV and FM sets. Made of new flexible low-loss

plastic with thin precision screwdriver tips.

Cat. No. Picture No. List Price Cat. No.

"2516—8 ½" long, for No. 6 Studs

"2517—3" long, for No. 6 Studs

"2519—7" long—1 end for No. 6 Studs;

other end for No. 4 Studs

"2524—8 ½" long, Slotted Type, for

No. 6 Studs \$1.00 .95 8 9 1.00

13

WALSCO WIRE DRESSING AND ALIGNMENT TOOL.

Made with thin (33") polystyrene handle, 7" long. Special tool on one end for dressing wires and finding loose connections or shorts. Other end has low capacity screwdriver tip.

Picture No. Cat. No. Picture °2512—Wire Dressing and Alignment Tool 10

WALSCO "K-TRAN" ALIGNMENT TOOL.

For adjustment of all miniature (K-Tran) I.F. transformers. Made of tough bone fibre. One end is machined to fit "K-tran" slots; other end is equipped with low-capacity metal screwdriver tip. Picture No. Cat. No.

°2515-"K-Tran" Alignment Tool \$0.75

WALSCO SERVICE TWEEZERS

These handy holding tools are made of fine spring steel and are polished nickel-plated. They have numerous uses in the shop and laboratory, such as starting screws and nuts in difficult places, holding wires and small parts together when soldering, clamping cemented items, installing dial cord and record-changer springs, looping and untying knots on drive cord,

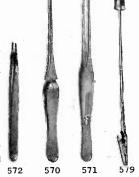
1 ist Price Cat. No. 570—Self - Closing Tweezer with cross-over action, 6½" long, serrated, blunt points\$0.95

(Standard Package: Display card with 10 tweezers . . . Cat. No. 570D) 572

571—Heavy-Duty Tweezer with slide-lock feature. Length 6 ½", serrated, blunt points \$1.20 (Standard Package: Display card with 10 tweezers . . . Cat. No. 571D)

572—Precision Tweezer with narrow, pointed ends especially suitable for delicate work. Over-all length 4½"..........\$0.55 (Standard Package: Display card with 20 tweezers...Cat. No. 572-D)

-WALSCO EE-ZEE Starting Too!—A handy tool for starting screws and nuts, inserting springs, etc. Front part of tool is flexible. Will reach into places which are inaccessible with fingers or pliers ...





IN PERMANENT Transparent PLASTIC PROMPT DELIVERY FOR INDUSTRIAL STORAGE BOXES with SLIDING TOPS AND OTHER QUANTITY USERS





HOLE PLUGS





Bulk

	THE	66	LINE"	
--	-----	----	-------	--

99c Net, Ea. Pkg. Description Part Quantity BULK PACK

			No.		per Package
SN.	AP-HOLE	PLUGS,	Steel,	Bright	Nickel-Plated

Fits	1/8 "	hole		
Fits	16"	hole		
Fits	1/4."	hole	3501-99	50
Fits	3/8"	hole	3502-99	
Fits	1/2"	hole	3503-99	
Pits	%″	hole	3504-99	30
Fits	3/4 "	hole	3505-99	25
Fits	7/8 "	hole		
Fits	1"	hole	3506-99	20
Fits	1 1/8"	hole		
Fits	14"	hole		

250	to 4999	5M and up
3501-1	\$14.30	\$11.00
3501-1A	15.75	12.10
3501-2	14.30	
3501-3	14.30	11.00
3501-4	15.75	12.10
3501-5	20.00	15.40
3501-6	20.00	15.40
3501-7	24.30	18.70
3501-8	31.45	24.20
3501-9	33.00	25.00
3501-10	34.30	26.40

Net Prices, per Thousand

VENTILATING HOLE PLUGS

Snap-fit for 1" hole	
Eyelet-type for \(\frac{19"}{32"}\) hole	
Evelet-type for ¾" hole	

3320-1	Prices quoted on request.
3320-2	18.00 14.50
3320-8	22.00 17.50



SNAP-IN TRIMOUNTS

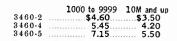


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GROMMETS, CABINET FEET AND CHASSIS MOUNTS

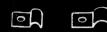






RUBBER GROMMETS

	D.:-					
A 11227 15 5 7 15 5 7 15 5 7 15 5 7 15 15 15 15 15 15 15 15 15 15 15 15 15	B 1/8 18 1/4 3/8 1/2	ensions, in C 16 16 17 14 14 14 32	D 16 16 16 16	E	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3840-1 \$5.90 to 9999 10M and up 3840-2 \$7.20 \$4.55 3840-3 9.20 7.05 3840-4 10.50 8.05 3840-5 14.40 11.10
				CORE	STRAIN RELIEFS	
For P	OSJ Wire .					3340-9 26.20 20.15
				1	RUBBER FEET	
	N-TYPE: Diameter	Heigh			3351-9950*	3350-1† 6.55 5.05
	%" ½" ¾"	32 3/8			3352-99 50* 3353-99 30* (*Wood screws included.)	3350-1† 6.55 5.05 3350-2† 7.05 5.45 3350-3† 14.10 10.85 (†No screws included,)
TACK	FEET: %" dia: ½" dia	meter meter			3355-99	3350-5 11.15 8.60 3350-15 11.50 8.85
				СН	ASSIS MOUNTS	
A 3/4 1	Dimension B 1/2 1/2	ns, inches C 1/4 1/4	D 3/8 1/2		2742-9930 2744-9920	2740-2 20.95 16.10 2740-4 26.20 20.15



CABLE CLAMPS Steel, cadmium plated







	For Cal		Mounting Hole S	ze			1000 to 9999	10M and up
⅓″	to 18"	diameter	#6		3331-99125	3330-1	\$4.25	\$3.30
18"		diameter			3332.99100	3330-2	4.95	3.80
1/4 "	to Ta"	diameter	# 8	******	3333-99 75	3330-3	5.60	4.30



WALSCOPELECTRONIC DELECTRONIC

The M Line

BULK PACK

IN PERMANENT Transparent PLASTIC PROMPT DELIVERY FOR INDUSTRIAL STORAGE BOXES with SLIDING TOPS AND OTHER QUANTITY USERS





Diameter		Des	scription	THE "99 LINE" 99c Net, Ea. Pkg.	BULK	PACK
Diameter Wire Size 250 to 4999 10m and unitary 100 to 4999 100 to 49			P	No. per Package	Bulk Part No.	Net Prices, per Thousand
## PHONO PANEL MOUNTING SPRINGS, Spring Steel, Cadmium-Plated	1 1/4 "	1/8" 32", 18", 18", 1/8", 193", 134",	.016"		3410-1 3410-2 3410-3 3410-4 3410-5 3400-1	\$11.75 \$ 8.95 11.75 8.95 12.00 9.20 12.00 9.20 12.25 9.35 13.50 10.00
A B C Thickness 111.55 8.50			PHONO P		n-Plated	
Style 1	A 1" 118" 34"	B C 7/8"	Thickness .075" .062"		3385-2	11.75 9.00
Solder Type	Style 2 Style 5 Style 6 Style 7 Style 8				3450-2 3450-5 3450-6 3450-7 3450-8	10.00 7.70 8.85 6.80 5.30 4.10 4.30 3.30 3.70 2.85
Available for Serew Numbers (Specify) 3281-99 150 3280-1 \$4.15 \$3.25 1 # 6, # 8, # 10 3281-99 150 3280-2 3.30 2.50 2 # 6, # 8 3282-99 150 3280-2 3.30 2.50 3 # 6, # 8 3283-99 150 3280-3 3.85 2.95 3 # 6, # 8 3283-99 150 3280-4 4.75 3.65 3 # 6, # 8 3283-99 150 3280-6 2.25 4.15 5 # 6, # 8, # 10 \$280-9 150 3280-6 2.25 4.15 5 # 6, # 8 \$10 \$280-9 150 3280-6 2.25 4.15 6 # 7 with # 8-32 x % "Screw \$288-1-8 \$288-6 \$2.25 4.15 7 with # 8-32 x % "Screw \$3288-1-8 \$328-9 \$328-1-8 8 # 10 # 10 # 520 \$3288-1-8 \$19.30 \$14.85 8 # 8 # 10 # 10 # 520 \$3288-1-8 \$19.30 \$14.85 8 # 8 # 10 # 10 # 520 \$3288-1-8 \$19.30 \$14.85 8 # 8 # 10 # 10 # 520 \$3288-1-8 \$19.30 \$14.85 8 # 8 # 10 # 10 # 520 \$3288-1-8 \$19.30 \$14.85 8 # 8 # 10 # 10 # 520 \$3288-1-8 \$19.30 \$14.85 8 # 8 # 10 # 10 # 10 # 10 # 10 # 10 # 1						1290
Style Numbers (Specify) 1000 to 9999 10M and up 1	Δv	ailable for Screw				
Too to 999 1M and up 100 to 999 100 to 99	Style Nur 1 #6 2 #6 3 #6 4 #6 5 #6	mbers (Specify) 5, #8, #10 6, #8 6, #8 6, #8 6, #8, #10, 1/4 6, #8	"	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3280-1 3280-2 3280-3 3280-4 3280-5	\$4.15 \$3.25 3.30 2.50 3.85 2.95 4.75 3.65 5.25 4.10
Fits Fits Fits Screw # Wire Gauge # \$250 to 4999 5M and up \$14.85 to 20 \$28.8-1-6 \$19.30 \$14.85 to 20 \$28.8-1-6 \$19.30 \$14.85 to 20 \$28.8-1-8 \$19.30 \$14.85 to 20 \$10.8 to 20 \$1	7 with	# 8-99 v 3/" Sore	anv.			
1000 to 9999 10M and up 100 to 9999 10M an	Style Sci 8 8 8 8	Fits Fit	ts uge # o 20 o 20	SOLDERLESS TYPE 3288-99	250 3288-1-6 3288-1-8	to 4999 5M and up \$19.30\$14.85 19.30 14.85
MINIATURE PLUGS AND JACKS, Not Assembled 2-Conductor Plug (type PL-291) 2590 BU \$235.00 \$185.00 2-Conductor Jack (type JK-48) 2591 BU 375.00 285.00 PHONO PLUGS AND JACKS Shielded, Single-Conductor Plug 2580-1 39.50 29.75 Shielded, Single-Conductor Jack 2580-6 62.00 47.50	10 11 12				3288-2-1 3288-2-2 3288-2-3 3288-2-4	\$2.85 \$2.20 4.00 3.10 3.15 2.40 4.00 3.10
100 to 999		C.		PLUGS AND JACKS		
2-Conductor Plug (type PL-291) 2590 BU \$235.00 \$185.00 2-Conductor Jack (type JK-48) 2591 BU 375.00 285.00 PHONO PLUGS AND JACKS Shielded, Single-Conductor Plug 2580-1 39.50 29.75 Shielded, Single-Conductor Jack 2580-6 62.00 47.50				MINIATURE PLUGS AND JACKS, Not Assembled	700	
Shielded, Single-Conductor Jack 2580-6 62.00 47.50	2-Conduct	or Jack (type JK	-48)	PHONO PLUGS AND JACKS	2590 BU\$2 2591 BU\$2	235.00\$185.00 375.00285.00
					2580-6	



The M Line

BULK PACK

IN PERMANENT Transparent PLASTIC PROMPT DELIVERY FOR INDUSTRIAL STORAGE BOXES with SLIDING TOPS AND OTHER QUANTITY USERS





MACHINE SCREWS



	THE	"99 LINE"		
Description	99¢ N	et, Ea. Pkg.	BUL	K PACK
	Part No. ROUND HEAD, Steel, C	Quantity per Package admium-Plated	Bulk Part No.	Net Prices, per Thousand
Sizes	9500.00			1000 to 9999 10M and up
#2-56 x 16"	3560-99	200	3561-2-1A	\$2.05 \$1.60
# 2-56 x % "				2.15 1.65
# 2-56 x ½" # 4-40 x ¼"			3561-2-4	2.25 1.75
#4-40 x 3/4"				2.20 1.70
# 4-40 x 1/2"			3561-4-3 3561-4-4	2.25 1.75 2.40 1.85
# 4-40 x 1"				2.40 1.85 3.00 2.30
# 6-32 x 1/4"	3100-99	225	3561-6-2	2.45 1.90
#6-32 x %"		225	3561-6-3	
#6-32 x ½" #6-32 x ¾"		200	3561-6-4	2.85 2.20
# 6-32 x 1"		175	3561-6-6	
#8-32 x 14"	0202	150	3561-6-8 3561-8-2	3.80 2.90 3.05 2.35
#8-32 x %"		175		2.40
#8-32 x ½"		160	3561-8-4	
#8-32 x ¾"		140	3561-8-6	4.20 3.25
#8-32 x 1" #10-32 x 1/"		125	3561-8-8	4.90 3.75
11000		150		4.35 3.35
t 10-32 x 34"	0.401 60	125		5.15 3.95
	5109-99	100	3561-10-8	5.85 4.50
	BINDING HEAD	, Brass		
6-32 x 1/4"			3565-6-2	4.25 3.25
t 6-32 x 3/8 16			3565-6-2 3565-6-3	
\$ 6-32 x ½"			3565-6-4	5.50 4.25
8-32 x ¼ "			3565-8-2	6.10 4.70
t 8-32 x 3/8"			3565-8-3	
		, , , , , , , , , , , , , , , , , , , ,	-5	~-1
	HEET METAL AND SI	FIE TADDING	THE STATE OF THE S	



SCREWS





	HEX HEAD,	Slotted, Type "B" — Blunt Point	•
Sizes		ea .	1000 to 9999 10M and u
#6 x 14"			34 71-6-2 \$3.45 \$2.65
#6 x %"			3+71-6-3 3.65 2.80
#6 x ½"			3471-6-4 3.80 2.95
#6 x 34"			3471-6-6 4.30 3.30
#6 x 1"			3471-6-8 4.70 3.60
#8 x 1/4"			3471-8-2 4.30 3.30
#8 x 3%"		2920-99125	3471-8-3 4.25 3.30
#8 x ½"		2922-99125	3471-8-4 4.55 3.50
#8 x 3/4"			3471-8-6 5.25 4.05
#8 x 1"			3471-8-8 6.00 4.60
#10 x 3/8"	The same of the sa		8471-10-3 5.25 4.05
#10 x 1/2"	·	2932-99100	3471-10-4 5.50 4.25
		2934-99 100	3471-10-6 6.20 4.75
#10 x 34"	BINDING	G HEAD, Type "A" — Pointed	7.73
		G HEAD, Type "A" — Pointed	3475-6-2 3.75 2.90
#6 x ¼"	BINDING	G HEAD, Type "A" — Pointed	
#6 x ¼" #6 x ¾"	BINDING	3 HEAD, Type "A" — Pointed	3475-6-2 3.75 2.90
#6 x ¼" #6 x %" #6 x ½"	BINDING	3 HEAD, Type "A" — Pointed	3475-6-2 3.75 2.90 3475-6-3 4.05 3.10
#6 x ¼" #6 x %" #6 x ½" #8 x %"	BINDING	G HEAD, Type "A" — Pointed	3475-6-2 3.75 2.90 3475-6-3 4.05 3.10 3475-6-4 4.25 3.25 3475-8-3 4.70 3.65
#6 x ¼" #6 x %" #6 x ½" #8 x %" #8 x ½"	BINDING	3 HEAD, Type "A" — Pointed	3475-6-2 3.75 2.90 3475-6-3 4.05 3.10 3475-6-4 4.25 3.25 3475-8-3 4.70 3.65
#6 x ¼" #6 x %" #6 x ½" #8 x %" #8 x ½"	BINDING	3 HEAD, Type "A" — Pointed	3475-6-2 3.75 2.90 3475-6-3 4.05 3.10 3475-6-4 4.25 3.25 3475-8-3 4.70 3.65 3475-8-4 5.00 3.85
#6 x ¼" #6 x %" #6 x ½" #8 x %" #8 x ½"	BINDING	3 HEAD, Type "A" — Pointed	3475-6-2 3.75 2.90 3475-6-3 4.05 3.10 3475-6-4 4.25 3.25 3475-8-3 4.70 3.65 3475-8-4 5.00 3.85 3475-8-6 5.80 4.45
#6 x ¼" #6 x %" #6 x ½" #8 x %" #8 x ½"	BINDING	G HEAD, Type "A" — Pointed HREAD-CUTTING, Steel, Cadmium	3475-6-2 3.75 2.90 3475-6-3 4.05 3.10 3475-6-4 4.25 3.25 3475-8-3 4.70 3.65 3475-8-4 5.00 3.85 3475-8-6 5.80 4.45
#6 x ¼" #6 x %" #6 x %" #8 x %" #8 x %" #8 x %" #6-32 x ¼"	BINDING	G HEAD, Type "A" — Pointed HREAD-CUTTING, Steel, Cadmium-	3475-6-2 3.75 2.90 3475-6-3 4.05 3.10 3475-6-4 4.25 3.25 3475-8-3 4.70 3.65 3475-8-4 5.00 3.85 3475-8-6 5.80 4.45
#6 x ¼" #6 x %" #6 x %" #8 x %" #8 x ½" #8 x ½" #6-32 x ¼"	ROUND HEAD, TH	3 HEAD, Type "A" — Pointed READ-CUTTING, Steel, Cadmium-	3475-6-2 3.75 2.90 3475-6-3 4.05 3.10 3475-6-4 4.25 3.25 3475-8-3 4.70 3.65 3475-8-4 5.00 3.85 3475-8-6 5.80 4.45 Plated 3477-6-2 6.50 4.75
#6 x ¼" #6 x %" #6 x %" #8 x %" #8 x %" #6-32 x ¼" #6-32 x %"	ROUND HEAD, TH	G HEAD, Type "A" — Pointed GREAD-CUTTING, Steel, Cadmium-	3475-6-2 3.75 2.90 3475-6-3 4.05 3.10 3475-6-4 4.25 3.25 3475-8-3 4.70 3.65 3475-8-4 5.00 3.85 3475-8-6 5.80 4.45 Plated 3477-6-2 6.50 4.75 3477-6-3 7.00 5.25
#6 x ¼" #6 x %" #6 x %" #8 x %" #8 x %" #8 x %"	ROUND HEAD, TH	G HEAD, Type "A" — Pointed IREAD-CUTTING, Steel, Cadmium-	3475-6-2 3.75 2.90 3475-6-3 4.05 3.10 3475-6-4 4.25 3.25 3475-8-3 4.70 3.65 3475-8-4 5.00 3.85 3475-8-6 5.80 4.45 Piated 3477-6-2 6.50 4.75 3477-6-3 7.00 5.25 3477-6-4 7.90 5.85



IN PERMANENT Transparent PLASTIC PROMPT DELIVERY FOR INDUSTRIAL STORAGE BOXES with SLIDING TOPS AND OTHER QUANTITY USERS





SET SCREWS

Steel, hardened

Description

THE "99 LINE"

99c Net, Ea. Pkg.

Part No.

Quantity per Package

BULK PACK

Bulk

Net Prices, per Thousand

500 to 9999 10M and up

100 to 900 1M and un

HEADLESS TYPE, Slotted, Cadmium-Plated

Assorted 3480-99 75	
#6-32 x 1/8"	3481-6-1\$9.85\$7.55
#6-32 x 18"	3481-6-1A 8.55 6.55
#6-32 x ¾"	3481-6-2 8.70 6.70
#8-32 x 1/8"	3481-8-1 9.85 7.55
#8-32 x 18" 3220-99	
#8-32 x ¼_"	3481-8-2 8.70 6.70
#10-32 x 18"	
#10-32 x ¼"	3481-10-2 8.70 6.70

HEX - ALLEN-HEAD

	100 to 333 IN and up
#4-40 x 1/8"	 3482-4-1 \$53.95 \$41.50 3480-5-1 54.60 42.00
#5-40 x 1/8"	 3480-6-1 55.25 42.50
# 6.32 x 1/8"	 3480-6-1 55.90 42.50
# 6-32 x 18	 3480-6-2 55.90 43.00
# 6-32 X 1/4	 3480-8-1 55.90 43.00
# 8-32 X 1/8	3480-8-1 A 56.55 43.50
# 0-02 X 13	3480-8-2 57.20 44.00
# 10.39 v 3."	3480-10-1A 57.20 44.00
#10-32 x 16	3480-10-2 57.85 44.50
1/4 -20 x 1/4"	 3480-1/4-2 59.15 45.50
/4 20 11 /4	



MISC. SCREWS





			WOOD SCREWS	1000 4 0000 1000
Şize	Head	Finish		1000 to 9999 10M and up
#2 x x 4% """ #2 x x x x x x x x x x x x x x x x x x x	Oval Hd. Oval Hd. Round Hd. Round Hd. Round Hd. Flat Hd. Round Hd.	Statuary Bronze Statuary Bronze Blued Blued Cadmium-Plated Blued	ND SCREWS, Steel, Statuary Bronz	3550-2-2 \$3.70 \$2.85 3550-2-3 3.90 3.00 3550-2-4 4.05 3.10 3550-3-8 3.30 2.55 3550-6-4 3.75 2.90 3550-6-7 4.75 3.70 3550-8-5 4.40 3.40 e Finish
#6-32 x 3/4			2951-99	2951-6-6 3.80 2.90 2951-6-8 4.45 3.45
#6-32 x 1" #8-32 x 1 1/4				2951-8-10 4.45 5.45 2951-8-10 6.65 5.10
		RACK SCREV	WS, Oval Head, Steel, Nickel-Plate	d
# 0-32 x 5% # 8-32 x 5% # 10-32 x 3% # 12-24 x 5%	"		0544 00 105	3541-6-5 3.05 2.35 3541-8-5 4.00 3.05 3541-10-6 5.15 3.95 3541-10-5 6.30 4.85





MISC. FASTENERS



SPADE BOLTS, Steel, Cadmium-Plated

		JEADE BOLIS, Steel, Cadmium-Flated	1000 to 9999 10M and up
#6-32 x % #6-32 x %	" O/L	3271-99 125 3272-99 150	3270-1 \$5.25 \$4.50 3270-2 4.00 3.15
		HAIR-PIN COTTERS	
	9// 000//		2650-1 1.90 1.50 2650-2 1.90 1.50 2650-3 2.80 2.25
		THREADED ROD, Steel	
#6-32; 8" #8-32; 8"			100 to 999 1M and up 2640-1\$45.25 \$34.80 2640-2 47.60 36.60



IN PERMANENT Transparent PLASTIC PROMPT DELIVERY FOR INDUSTRIAL STORAGE BOXES with SLIDING TOPS AND OTHER QUANTITY USERS





HEX NUTS







Description

THE "99 LINE" 99c Net. Ea. Pka

BULK PACK

	Desci	ription	77C Net	, Ea. Pkg.			
	Width		Part No.	Quantity per Package	Bulk Part No.	Net Pr per Tho	
Thread Size	Across Flats	Thickness				1000 to 9999	10M and up
		SMALL PATT	ERN, Steel, C	admium-Plated			
Assorted	**********		3520-99	175			
2-56 4-40 6-32 8-32 10-32	3 " 16 " 14 " 16 "	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	3175-99 3180-99	200	3521-2 3521-4 3521-6 3521-8 3521-10	3.25 3.50	3.25 2.50
		STANDARD PA	ATTERN, Steel.	Cadmium-Plated			
6.32 8.32 10.32	16" 111" 338"	24",			3522-6 3522-8 3522·10	3.65	2.80
		BRASS	NUTS, Nicke	I-Plated			
4-36 4-40 6-32 8-32 10-32	1/4" 1/4" 1/4" 3/2"	3 //	3180-B-99* 3190-B-99* 3195-B-99*		3523-4† 3523-6† 3523-8† 3523-10† .	4.75 4.75 3.50 6.50 6.90 10% for Nicke	3.50 2.75 5.00 5.35



MOUNTING NUTS





Thread Size	Width Across Flats	Thickness	1000 to 9999 10M and up
3/8 - 32	1/2 "	VOLUME CONTROL HEX NUTS, Steel, Cadmium-Plated	d 3530-1 \$ 6.65 \$ 5.10
		VOLUME CONTROL HEX NUTS, Brass	
3/ ₈ - 3 2	16"	3."	3530-1B 16.00 12.50
		TOGGLE SWITCH HEX NUTS, Steel, Cadmium-Plated	
15-32	18"	3532-9950	3530-2 11.00 8.45
		TOGGLE SWITCH RING NUTS, Brass, Nickel-Plated	
15-32	33"	3533·9950	3530-3 12.10 9.30
		ELECTRIC SWITCH AND FIXTURE NUTS	
1/8 P	1/2 "	1/8"	3530-4 11.30 8.60





SPECIAL NUTS





KNURLED THUMB NUTS, Brass

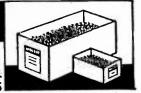
		100	:0 to 9999 10	M and up
# 6-32 # 8-32 # 10-32		2971-6 2971-8 2971-10	8.00	6.15 6.15 17.60
# 10 00	WING NUTS, Zamack Metal, Nickel-Plated	2911-10	22.03	17.00
# 6-32 # 8-32 # 10-32	The loss, Lamack Metal, McKer-raged	2976-6 2976-8 2976-10	10.75	4.95 8.30 10.00
	ACORN NUTS, PAL TYPE, Steel, Nickel-Plated			
# 6·32 # 8·32 # 10·32		2961-6 2961-8 2961-10	12.25	8.20 9.40 11.70
	SPEED NUTS, Tempered Steel, Parkerized			
$\# 6.32 \\ \# 8.32 \\ \# 10.24 \\ \frac{1}{4}.20$		2981-6 2981-8 2981-10 2981-1/4		3.95 3.95 4.35 6.30



The 🕦 Line

BULK PACK

IN PERMANENT Transparent PLASTIC PROMPT DELIVERY FOR INDUSTRIAL STORAGE BOXES with SLIDING TOPS AND OTHER QUANTITY USERS







INSULATING WASHERS Phenolic Fibre



THE "99 LINE"

99c Net Fa. Pka.

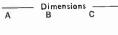
776	MCI,	Eu.	r kg.
Part No.			Quantity per Package

BULK PACK

Bulk	Net Prices,				
irt No.	per Thousand				
	1000 to 9999	10M and up			

Fits Screw No.

6 8 10 1/4" 3/8"



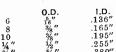
Description

EXTRUDED TYPE

FLAT TYPE

3431-E-9	9	 100
3432-E-9		
3433-E-9		
3434-E-9		
3435-E-9	9	 75

3482-6 \$5.25 \$4.05 3432-8 5.25 4.05 3432-10 5.25 4.05 3432-14 5.75 4.40 3432-36 7.05 5.40





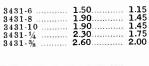
.136" .165" .195" .255"



3432-F-99 250 3433-F-99 250 3434-F-99..... 3435-F-99.....200

3431-F-99.....



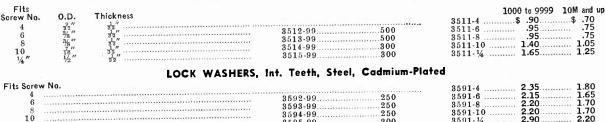




FLAT METAL WASHERS, Steel, Cadmium-Plated

MISC. WASHERS





	1/4 " 3/8 "					200 100
				SPRING	(FRICTION)	WASHERS
1.D. 1/8" 18" 14"		0.D. 5." 16.3%" 1/2"	Thickness .010" .008" .012"			Nickel-Plated

3591-10 3591-¼ 3591-¾	2.90	2.20
3425-1 3425-2 3425-3	7.75	6.00

Fits Screw No. K

3544-99.....300 3545-99 250 3546-99 200

3542-6 1 3542-8 1 3542-10 2 3542-12 2	.80 1.40 .40 1.85
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Fits Shaft

0.D.



I.D.



Thickness





Thickness KNOB FELT WASHERS, Brown

3420-2	 4.15	3.20
3420-3	3.60	2.75

3490-1 1.75...... 1.10

PHONE TIPS



}§" O/L

2725-99......60

3490-99.....250

250 to 4999 5M and up 2725-1\$9.05\$6.95



WALSCOPELECTRONIC HARDWARE

The M Line

BULK PACK







Description



MISC. CLIPS



THE "99 LINE" 99c Net, Ea. Pkg.

		Description		, g.	DOL	N FACK
			Part No.	Quantity per Package	Bulk Part No.	Net Prices, per Thousand
Length	Width	Mtg. Hole Size				1000 to 9999 10M and up
		SPRING CLIPS	i, Spring Bras	is, Nickel-Plated	·	
18"	32 " 18"	4 and 5	2731-99 2732-99	100 75	2730-1 2730-2	\$5.65 \$4.35 7.65 5.90
			GRID CAPS			
For Glass For Meta	s Tubes	T'' Tubes			2600-1	250 to 4999 5M and up \$17.50 \$13.50 6.00 3.90
			FUSE CLIPS			
For 32" I	Fuses				2720-1 2720-2	8.00 5.75 14.00 10.80
		FUSI	E INSUL/	ATORS		
						ν.

 1 ½ " long, ¼ " I.D.
 1000 to 9999 10M and up

 ½ " long, ¼ " I.D.
 2690-1 \$3.35 \$2.55

 % " long, ¼ " I.D.
 2690-2 2.95 2.30



ANGLE BRACKETS



Material Brass, cadmium-plated Steel, cadmium-plated Brass (one hole tapped 6-32)	1/4"	B 14" 5%" 18"	C 1/4" 18" 18"		500 to 9999 10M and up 2610-1 \$5.70 \$4.65 2610-2 6.50 5.40 2610-5 9.75 7.50
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INSULATING TUBING



FLEXITUBE

Extruded vinyl tubing; dielectric strength: 15,000 v. Available in Black, Green, Red, and Clear. Please specify color.

Part No.	Size, B & S Gauge No.	Approx. I.D Inches Mi		100 to 1999* ft.	011 * 4
R 600	1.8	.042 1			2M* ft. and up
R 601	16			\$15.00/M ft.	\$8.82/M ft.
R 602	10		.4	15.00/M ft.	8.82/M ft.
	14		.6	15.60/M ft.	10.37/M ft.
R 603	12	.085 2		16.00/M ft.	
R 604	10	.106 2	7		11.91/M ft.
R 605	- 8			18.00/M ft.	12.20/M ft.
R 606	e e		b	22.20/M ft.	13.30/M ft.
	9	.166 4		26.00/M ft.	16.00/M ft.
R 607	4	.208 5		32.00/M ft.	
R 608	2	.263 6			23.00/M ft.
		.200	0	45.00/M ft.	30.00/M ft.

RAYOFLEX

Lacquered-rayon tubing, radio grade. Meets A.S.T.M. Specifications B-2.

		Available in Black	, Blue, Red, and Yellow. Please specify color.		
Part No	Size, B & S Gauge No.	Approx. I.D. Inches MM.			
(I-	ollowing sizes suppled in continu	ious lengths.)		100 to 1999* ft.	2M* ft. and up
R 630 R 631 R 632 R 633	18 15 12	.042 1 .059 1.5 .085 2		\$ 39.50/M ft. 43.70/M ft. 51.90/M ft.	\$ 30.40/M ft. 33.60/M ft. 39.90/M ft.
R 634	6 Following sizes supplied in 30-in	.166 4		60.00/M ft. 67.80/M ft.	46.20/M ft. 52.20/M ft.
R 636 R 637 R 638 *Variou	2 00 00 0000 8 sizes and colors, but not less	14" 6.5 15" 8.5 36" 9.5 12" 13	y one size or color, may be combined in one o	106.80/M ft. 143.20/M ft. 171.80/M ft. 236.80/M ft. order to take advant	82.20/M ft. 110.20/M ft. 132.20/M ft. 182.20/M ft.
	nts. Sizes other than listed about	ve can be supplied	Prices quoted on request.		qualities



BULK PRICE LIST

DIAL CABLE & CORDS — GRILLE CLOTH & SCREENING — CHEMICALS & FINISHES

BEVERLY HILLS, CALIFORNIA



DIAL CABLE AND CORDS



Part No.	Description	3000 to 14,999 ft.	15M ft. and up
R 30	METAL CABLES Phosphor bronze cable, twisted, 42-strand, .032" diameter Bronze cable, braided, 16-strand, .038" diameter Bronze cable, braided, 8-strand, .026" diameter	\$20.00/M ft.	\$15.40/M ft.
R 31		10.00/M ft.	8.00/M ft.
R 32		11.00/M ft.	8.50/M ft.
R 35	Constructed with impregnated fibreglass core, and black nylon braid. Construction combines minimum stretch, high coefficient of friction, and maximum resistance to abrasion. "Special-Thin" Cord, approximately .026" diameter. Standard Cord, approximately .032" diameter. Medium Cord, approximately .040" diameter. Heavy-Duty Cord, approximately .060" diameter.	9.00/M ft.	6.05/M ft.
R 39		12.75/M ft.	9.20/M ft.
R 34		13.50/M ft.	9.90/M ft.
R 33		17.50/M ft.	13.50/M ft.
	GRILLE CLOTH, SCREENING AND METAL GRILLE		

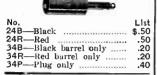
		AND METAL GRILLE	()		
Part No.	CONTRACTOR OF THE PARTY OF THE	Description		5 to 49 yd.	50 yd. and up
R 362 BU	Available in a variety of colors	GRILLE CLOTH and patterns. Average width of material is 5	2"	\$3.45/yd.	\$2.30 /yd.
R 374-1 BU	Color Wid	FLOCKED GRILLE SCREENING th, inches 11		10 to 99 ft. \$.45/lin. ft. .45/lin. ft.	100 ft. and up \$.35/lin. ft. .35/lin. ft.
R 374-3 BU R 376-1 BU R 376-3 BU R 378-1 BU	Light Ivory Brown Light Ivory Brown	11		.65/lin. ft. .65/lin. ft. 1.30/lin. ft. 1.30/lin. ft.	.50/lin. ft. .50/lin. ft. 1.00/lin. ft. 1.00/lin. ft.
R 378-3 BU	Note: Grille Cloth and Flocked	Grille Screening also available in "cut-to-ord		Prices	Quoted on Request

	ORNAMENTAL METAL GRILLE	
R 380	Available in a variety of finishes and in any size up to 48" width	Request

	CHEMICALS AND FINISHES	O E	
Part No.	INDUSTRIAL ADHESIVES	1-gal. Cans	5-gal. Cans
R 21 R 40 R 50 R 110 R 150	WALSCO Fabric Cement WALSCO Plastic Cement WALSCO Radio Cement WALSCO Rubber Cement WALSCO Rober Cement WALSCO Polystyrene Cement	\$7.50/gal. 6.50/gal. 6.50/gal. 7.50/gal. 7.50/gal.	\$5.80/gal. 5.00/gal. 5.00/gal. 5.80/gal. 5.80/gal.
	SOLVENTS & THINNERS		
R 1 R 2 R 60 R 160 R 214	For Lacquer No. 120 For Cement No. R 110 and Wrinkle Varnish No. R 145 For Cements Nos. R 20, R 40, and R 50 For Cement No. R 150 Carbon-Tetrachloride	4.00/gal. 1.25/gal. 2.80/gal. 2.50/gal. 3.50/gal.	3.10/gal. .95/gal. 2.15/gal. 1.95/gal. 2.70/gal.
	SPECIAL CHEMICALS	<u>_</u> .	
R 22	WALSCOLUB-B	1-lb. Cans \$1.50/lb.	5-lb, Cans \$1.20/lb.
R 190	Insulating Varnish	1-gal. Cans \$7.90/gal.	5-gal Cans \$6.25/gal.
	POLISHES		
R 410 R 414 R 430	WALSCO Super Polish Scratch-Removing Polish, Dark Scratch-Removing Polish, Light	2.85/gal. 2.50/gal. 2.50/gal.	2.25/gal. 1.95/gal. 1.95/gal.
	LACQUERS AND FINISHES		
R 120 R 145	Crystallizing Lacquer: Black, Green, Grey, Clear, Brown Wrinkle Varnish — Air-Dry: Grey or Black	10,00/gal. 9.00/gal.	8.15/gal. 7.90/gal.

RADIO PRODUCTS

ICA Bakelite Double Phone Plua



ICA Midget Phone Plug

Overall length— 2¼". Diameter of barrel ½".	.0.
No.	List
29B—Black	\$.50
29R—Red	.50
29P-Plug only	.40
39B-Black barrel only	.20
39R—Red barrel only	.20

ICA Stubby Shielded Phone Plug



Barrel Measures

(III)

diameter x
1" long.
No. 27 List \$.80
No. 37—Barrel onlyList \$.45

ICA Midget Shielded Phone Plug

rel 18". Overall size of Plug 2 1/4"	
No. 30 List \$.70 No. 40—Barrel on	lvList \$.40

ICA 3-Wire Microphone Plug



Has solder connections for cable or microphone use. Barrel molded of bakelite; brass parts, nickel plated. List \$1.00

ICA Shielded Double Phone Plug

Nickel Barrel	
Brass Shell	- Brancia
Nickel Plated	

Supplied with fibre insulating tube. No. 25 List \$.90 No. 35—Barrel only List \$.50

Wire Connector with Banana Plug Receptacle

Ideal for quick splicing for testing point.



No. 1933 ICA Shielded 3-Way Portable

Microphone Jack



For all types of microphones. Sturdily constructed of brass parts with phosphor bronze springs. Nicket plated and thoroughly insulated.List \$1.50 No. 1904

ICA Bakelite Portable Jacks



Single Open Circuit

No. 1911—Overall Size 1%" Diameter ¾"List \$.70

No. 1903—Portable Jack, black Bakelite barrelList \$1.10

ICA Shielded Portable Jack

Single Open (B) Circuit

1913—21%" Long, 1½" No. 528R—Red List \$.20 No. 528B—Black List \$.20

Phone Plua Adapter



Soldering or wiring not necessary. No. 33List \$.45

ICA De Luxe Phone Jacks

New Design

Greater Efficiency



phosphor bronze. Hooked t soldering lugs—Cannot turn short. For standard ¼" plug. No.

1920-Single Open Circuit \$.75 1921-Single Closed Circuit.. .85 1921—Single Closes
1922—Three-Way Microphone
1.10 Jack

ICA Phone Jacks



Smaller type precision made jacks for limited space. Complete with nut and metal washer.

No.	List
1870-Single open circuit	\$.50
1871—Single closed circuit	.55
1872-3-way mike jack	.60

ICA Panel Mounting Jacks



Small and Compact

Lict

325-Single Open Circuit \$.50 1905-3-Way Microphone Jack .75

ICA Insulated Tip Jacks



With receptacle for standard phone tips. List No. 889B-Black\$.15 889R-Red15

Insulated Banana Jacks

With	receptacle	for	banana	p	lugs.
No. 8	88B—Blaci	k	Li	sŧ	\$.15
No. 8	88R—Red		Li	st	.15

ICA Bakelite Insulated Tip Jacks

Moulded of Low-Loss Bakelite

List 1889—Black 1890—Red -Black\$.20 .20

Bakelite Banana Type Jacks No. 1891-BlackList \$.20 No. 1892-RedList .20

ICA Combination Banana Plug or Phone Tip Jack

Made to take banana plug or standard phone tips interchangeably. Insulated cap in black and red -With washers and nuts.

Microphone Connectors





No. 1929-For use on chassis unit or in microphone. Single contactList \$.30
No. 1930—Closed circuit connector. With spring actuated contactList .40

Microphone Connectors



Shielded cable type. Single contact. No. 1931--Female connection\$.50 1932-Male connection40

ICA Insulated Binding Posts with Jack for Banana





ICA All Metal Binding Post

Designed for high am-perage use and where low resistance connec-tions are necessary on test equipment, etc. Nickel plated brass. Di-mensions same as No. 617 below.

No. 620 List \$.20

ICA Bakelite Binding Posts



List 617-Red\$.18 618—Black18



List

ICA Vise-Grip Binding Post



Engineered on principle of a vise. Can cause no damage to even finest wire strands. Wire hole strands. Wire hole and designating sym-bol always in align-ment. Two styles.

No. 630 Series-Has 6/32 Male Threaded Shank List \$.50 No. 690 Series—Has 6/32 Female Thread List \$.50 Marking No. Marking No. ANT ANT 690 630 GND 631 GND 691 692 632 A A 693 633 G G 634 + 694 + 635 695

696

637 PLAIN (No 697 PLAIN (No

Rec.

Marking)

Bakelite Binding Post Heads

Bakelite Heads only with Brass Threaded Insert. for 8/32 Screw.



No. 628-RedList \$.10 No. 629-BlackList .10

Insulated Midget Phone Tip Plua



No. 365 List \$.15

U. S. Army and Navy Specification Plugs



Manufac-tured to meet the very exact-ing specifica-

tions of the U.S. Army Signal Corps and U.S. Navy. Will fit all standard jacks.

No. P.L. 55-2 Conductor Plug (long)List \$.85 No. P.L. 68-3 Conductor Microphone PlugList \$1.75

ICA Insulated Solderless Plug



2" long -- fits all standard phone tip jacks. No. 885B-BlackList \$.18

No. 885R-RedList .18

ICA Sr. Solderless Plugs



118" overall length. No. 358 List \$.10

ICA Jr. Solderless Plugs

13" overall length. Tip ½". No. 359

List \$.10

ICA Brass Tip Jacks Nickel Plated

No. 357 List \$.10



ICA Insulated Needle Point Tip Plug

886B -Black List \$.18 886R — Red List \$.18 Above with Insulating Sleeve No. 341B—Black List \$.10 No. 341R—Red List .10

ICA Split Banana Plugs



For positive and durable spring action. Allows spring to fit into jack, cannot bend out of shape - Complete with two nuts. No. 403List \$.12

636

Rec.

Marking)

PRODUCTS

ICA Insulated Solderless Split Banana Plugs



Set screw provided at side of bar-rel to fasten screw without soldering

	1½" Long	
No. 883B-	-BlackList	\$.20
No. 883R-	-RedList	.20
	21/a" Long	

With sleeve covering set screws. No. 882B-BlackList \$.40 -RedList .40 4" Long

With sleeve covering set screws. No. 881B—Black List \$.50 No. 881R—Red List .50

With Solderless Wire Nut No. 434B-BlackList \$.20 No. 434R-RedList .20

ICA Transmitting Banana Jacks

No. 402 Nickel Plated Brass List \$.09



Insulated Spade Lug

Lug with banana plug receptacle on lead end.	2
No. 887B—Black No. 887R—Red	

10 in Standard Carton

Bervilium Banana Pluas



Approved by the Signal Corps and other government agen-

cies. These plugs are used in all government equipment. Made of Beryllium copper and guaranteed for its spring and durability. Threaded plug accommodates 6/32



No. 419-Overall size 13" long. Shank length 1/4" long. Diameter of shank 1/8".

No. 420—Overall size 1 1/8" long. Threaded shank length 3/8" long threaded for 6/32 nuts.
No. List
419—Rivet type

ICA Spade Lug



Can be used on any size screw or terminal up to size 10. Receptacle fits all I.C.A. and other make Banana Plugs.

879List \$5.50 C 100 in Standard Package No. 879

Pluas and Jacks



A new line of heavy duty transmitting plugs and jacks. Plug-in type with positive grip contacts. Equipped with heavy insulated threaded heads and handles for safe handling on high R.F. currents. Supplied with large hex nuts for panel mounting.

Handle 1,000 Volts at 10 Amps

No.	List
450-Medium Plug-RED\$.55
451—Medium Plug-BLACK	.55
452-Medium Jack-RED	.95
453—Medium Jack-BLACK	.95
454—Giant Plug-RED	.75
455—Giant Plug-BLACK	.7 5
456-Giant Jack-RED	1.15
457—Giant Jack-BLACK 3	1.15

ICA Alligator Clips



ICA Alligator Clip with Screw Connection



Convenient screw Good firm bite. connection eliminates the necessity for soldering. Overall length 2". No. 376 List \$.12

ICA Insulated Alligator Clips



No. 884B-Black No. 884R-Red List \$.20 ICA Insulated Alligator Clip

with Phone Tip Jack



Has standard phone tip jack in insulated sleeve. Will accommodate phone tip or solderless plug tips. No. 525R-Red List \$.45 No. 525B—Black

ICA Insulated Combination



Jack Alligator Clip

An insulated alligator clip with a dual purpose Jack in catalin sleeve—Equipped with the new combination Jack which takes either solderless phone tip or Banana plug. Overall length—3¼".

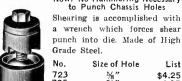
No. 520R—Red List \$.50 No. 520B—Black List .50

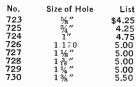
ICA SHIELDED 3-WIRE MICROPHONE PLUG Shielded Nickel Barrel



No. 1900 List \$1.45

ICA SHEARING PUNCHES Now! No Hammering Necessary





ICA IMPROVED ALL-PURPOSE CIRCLE CUTTER

Will Cut Holes from 11/2 to 8 Inches Cutting bar holder is %" in diameter and also accommodates a centering drill or any size pilot pin. Cutting bar is 3%" square and is arranged to

hold a 3" high speed



No. 775List \$6.60



ICA PLUG AND JACK Used on RCA recording units, ceivers and auto sets.

No. List 2383---Pin Plug \$.10

2385—Socket & Shield .15

ICA SQUARE HOLE SHEARING PUNCH

This new punch permits the cutting of any size odd-shape hole (square rectangular, hexagon, oblong, etc.) on any size panel or chassis. Good for Enlarging or punching TRANS-FORMER Holes.

No. 790List \$16.50

REPLACEMENT DRILLS AND CUTTERS

Used as replacement on ICA No. 775 and No. 780 circle cutters as well as on other make cutters.

No. 776—Replacement drill for No. 775 Circle Cutter List \$.60

No. 777—Replacement cutter for No. 775 Circle Cutter List .85

781—Replacement drill for No. 780 Circle Cutter List .60

o. 782—Replacement cutter for No. 780 Circle Cutter List .90

ICA UNIVERSAL MULTI-PURPOSE CUTTING TOOL

This handy tool can be used for counter-sinking, beading, drilling or cutting holes. Equipped with 3" drill for holes from 7" diameter up to 3" diameter. Can be used either in drill press or hand brace. Also acts as a boring tool when used in a lathe.

No. 780List \$4.00

ICA RIVET AND EYELET PUNCH SET



A Universal Tool that can be used for either riveting or eyeletting. Holder is made of cast iron with hexagonal sides, thus permitting the tool to be placed in a vise without slipping.

No. 785-Complete with ample assortment of eyelets and rivets.

List \$4.00

RIVET AND EYELET ASSORTMENT

Additional eyelets and rivets can be purchased separately.
No. 5265—(Assortment of 100).....List \$.80

RIVET & EYELET SETTING TOOL



.....List \$.90 No. 786 Copyright by U. C. P., Inc.

cutting bit.

ICA SOLDERING IRONS



ICA Highest Quality Soldering Irons are "Best By Test". Each model is submitted to the most By Test. Each model is submitted to the most severe tests and results prove conclusively that ICA irons are equal, if not superior, to any soldering iron on the market today.

60 WATT IRON	
No. 1960-A-105-120 VoltsList \$	5.00
No. 1963-220 VoltsList	
85 WATT IRON	
No. 1962-A-105-120 VoltsList \$	6.50
No. 1964-220 Volts List	

115 WATT IRON

No. 1961-A-105-120 VoltsList	\$7.50
No. 1965-220 VoltsList	7.50
	_

REPLACEMENT ELEMENTS FOR ICA SOLDERING IRONS

Due to the construction of the ICA Soldering lrons, burnt out	>		=Q	L.CA.
aloments our be o	onilz	romound	on d	wan laan

105-120 Volts			220 Volts		ts
No.	Watts	List	No. 1990 1991 1992	Watts	L!st
1985	60	\$3.00	1990	60	\$3.00
1986	85	3.50	1991	85	3.50
1987	115	3.50	1992	115	3.50

REPLACEMENT TIPS

by anyone.



Available in All Sizes

Made of a special copper alloy. Electrolytically pure. For replacement in ICA Soldering Irons. Can also be used in American Beauty and irons of similar construction.

No.	Watts	Tips	Diam.	Length	List
1970	60	Flat	3/8 "	3"	\$.60
1972	85	Point	3/8"	3 1/2 "	.60
1971	115	Point	70"	3 ½ "	1.00

ICA UNBREAKABLE "TURN-TITE" SOCKET WRENCHES



Handle is of ribbed shockproof un-" long. breakable material.

No. 940 941 942	Socket	List \$.95 .95	No. 944 945 946	Socket 3/8"	List \$.95 .95
943	16 11" 32"	.95	949 8	Set of 7 wr as above	

ICA UNBREAKABLE VOLUME CONTROL WRENCH



Socket is 18" diameter. No. 937 List \$1.75

ICA "TURN-TITE" SOCKET WRENCHES

HOLLOW SHAFTS



Made of hardened steel, cadmium plated, with sturdy Black japanned wooden handles.

6 Inches Long	9 Inches Long
No. List 898— 1 " \$.45 890— 14" 45 891— 1 " 45 892— 34" 45 893— 1 " 45 899— 1/2" 45 910—Set of 6 Wrenches 2.70	No. List 900—\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

ICA FLEXIBLE SOCKET WRENCH



Especially designed for hard-to-reach spots. Can actually be used around corners or under obstructing objects.

No. 913-4" Hex	List	\$1.50
No. 914—16" Hex	List	1,50

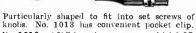
ICA LOCK SOCKET WRENCH AND SCREW DRIVER SET



The all-purpose socket wrench, packed in neat, enameled steel case. Includes sturdy 6½" Wood Grip Screw Driver—4" L Handle—3¾" Extension Adaptor, ¼", ½", ¾", ¾", ¾" and ½" Hex—¾" Round Knurled Socket—¼" and ½" Square Sockets.

No. 999List \$2.75

ICA AMBER COLORED UNBREAKABLE MIDGET SCREW DRIVER



No. 1013-4 % " length List \$.25 No. 1017-7" lengthList .75



ICA FLEXIBLE SCREW DRIVER
For the Hard to Reach Spots
Allows access to screws in hard to reach and out of the way places. Can go under objects or around corners.List \$2.00

ICA COMPLETE NEUTRALIZING TOOL KIT



The kit consists of one of each of the following 10A tools, described herein:—Nos. 382, 1008, 987, 1015, 977, 996, 992, 985, 990, 1024, 1019, 1026, 1022, 1002, 1013, 1028, 1039, 1029, 1033, 935, 937.

No. 995-Kit, Complete with Carrying Case List \$20.00

ICA UTILITY NEUTRALIZING AND ALIGNING TOOL KIT

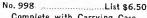


A handy Service Man's Kit containing carefully selected tools suitable for varied uses. Packed in vest pocket leatherette case.

No. 997List \$3.00

ICA NEUTRALIZING AND ALIGNING TOOL KIT

The Kit consists of twelve separate and distinct parts, some of which can be employed for several operations. These units telescope into each other, forming four separate tools when assembled.



Complete with Carrying Case

ICA DE LUXE NEUTRALIZING AND ALIGNING TOOL KIT



Complete for Every Service Need

Consists of fourteen tools, most of which telescope into one another, forming six units when assembled

into the attractive black leatherette case. The complete kit in carrying case can be kept in the pocket. Tools com-plete with carrying case.

No.	List
994	 \$7.50

ICA NEUTRALIZING AND ALIGNMENT TOOL KIT — SIGNAL CORPS No. TE45-A



No. 935 Screw

Driver -5" Screw Driver

-Insulated Screw

Driver

No. 993 ..

ICA Catalog No. 993

This versatile kit, designed for and used by the Signal Corps, is also strongly recommended for general service use. Compact, and contained in a handsome leather-ette case, this kit con-sists of the following:

1-Bone Fibre No. 1015 Neutralizing Tool

No. 980—Hex Tools, 1.1. No. 981—Hex Tools, 1.1. No. 98 2-2-

.....List \$6.75

ICA DIAL CABLE ADJUSTER



Handy aid to replacing slipped-off dial cable over drive drum. Permits easy manipulation in cramped places.

No. 437 .List \$.75

ICA 4-in-1 NEUTRALIZING TOOLS, SCREW DRIVER AND

WRENCH Made of Fenoline Fully Insulated



No. 1019—CompleteList \$.85

ICA 5-IN-1 NEUTRALIZING AND COMPENSATING TOOL

Same features as the 4-in-1 tool described above with an additional all metal screw driver.



No. 1022 List \$1.35

ICA ALIGNMENT WRENCH

For RCA, Philoo, etc.



Used on all makes Air Trimmer. Made of ½" Fenoline Rod—8½" long—one end has hollow shaft hexagon wrench—other end has an especially shaped hook. No. 1008.

ICA BALANCING TOOL



Fits into No. 1019 Neutralizing Tool. No. 1026 List \$.50

INSULATED NEUTRALIZING WRENCHES



Hexed-Full Length

For Phileo, Majestic and Other Receivers

No.	985-6"	longList	\$.25
No.	9868"	long List	.35
No.	980-5"	longList	.25
No.	981-5"	long, 7 diaList	.30

ICA Alignment Tool for Philco Receivers For Air Trimmer Sets



Has specially designed metal clip for air trimmers. Made of narrow fibre rod, 72" diam. by No. 1033

ICA Insulated Adjustable Neutralizing Tools



Absolutely no metal parts. Screw driver slides into inside of neutralizing wrench.

No. 990—Extending from 6 to 10"..List \$.90
No. 991—Extending from 12 to 16"..List 1.00

ICA NEUTRALIZING AND ALIGNING TOOL

₩₩ T4-130 A ⑤

ICA NEUTRALIZING AND ALIGNING TOOL



Machined of bakelite rod 9/32 inch diameter. Designed for Western Electric Co. Approved by U. S. Army and Navy.

No. 1006 List \$1.25

ICA ALL PURPOSE ALIGNING TOOL



Handle is of %" Fenoline. End has Socket Screw Driver for neutralizing all iron core tuning systems.

.....List \$.75 No. 1002.....

ICA TEST-LITE



amp., and plug complete.

No. 938 List \$1.50

ICA Neutralizing Tools with Metal Nibs

Patent No. U.S. 83,321. will outlast all other Sturdy, unbreakable, w No. 996.....List \$1.50

ICA BONE FIBRE SCREW DRIVER

-0 Of 16" bone fibre rod with a sturdy blade. No. 1029 List \$.70

ICA BONE FIBRE SCREW DRIVER

Double Edged—No Metal—Fully Insulated Made of ¼" Bone Fibre Rod No. 1039 List \$.40

ICA NEUTRALIZING TOOL

For Push Button Tuners



The Socket is 34" in diameter, and contains a screw driver blade. No. 1003 List \$.75

ICA SET TRIMMER NEUTRALIZING TOOLS

For Philco, Zenith, RCA, etc.

Fits the smallest size trimmer condensers. Trimmer end is $\frac{7}{32}$ " diam. to fit $\frac{1}{4}$ " hole. No. 992— 6" long List \$1.00 No. 933—10" long List 1.25

ICA NARROW SHAFT ALIGNMENT TOOL



ICA ALIGNMENT TOOLS

For RCA Receivers

Narrow shaft Neutralizing Tools made of Bone Fibre $-\frac{\pi}{32}$ wide. Has screw nib inserted in Brass Collar on end.

No. 1015.....List \$.75

ICA MAGIC TUNING ALIGNMENT TOOL

Consists of a Bakelite rod with a Brass cylinder at one end, and a special finely divided iron core at the other end. No. 977.....List \$1.00

ICA FORK TYPE NEUTRALIZING WRENCH and SCREW DRIVER

or RCA and Other Sets



ICA Fenoline Neutralizing Screw Drivers

Made of Fenoline. Strong and sturdy, completely insulated for neutralizing and aligning coils, condensers, receivers, etc.

No. 1028 List \$.40

ICA ALL-PURPOSE TEST LEAD KIT Complete For Every Testing Need

Equipped with one pair of test leads which have 48" of red and black kinkless live rubber wire. One end insulated removable has banana-type plugs.
Included in this test kit:

1 pr. test leads.
1 pr. insulated alligator pr. insulated alligator clips—red and black. pr. insulated spade lugs—red and black. pr. insulated needle points—red and black. 1005—Kit, complete List \$3.50

1

No.



ICA PHONO-NEEDLE POINT TEST LEADS With Slim Handles and Flexible Wire

Flexible rubber-covered, kinkless wire, 48" long. Tenite handles wire, 48 4" long.

Νo. -With Phone Tips. ..\$.90 382-

381-With Spade Terminals. .90

379—With Alligator Citips...1.10 ICA DE LUXE EXTRAFLEXIBLE TEST LEADS

Slim Handles & Solderless Plugs 48" Extra-Flexible Test Leads with 4" Tenite handles. New non-kinking, rubber insulated insulated

No. List 355—With Phone Tips...\$.90

ICA PENCIL TYPE TEST LEADS

2

=6

Finger-Grip Molded Tips

All connections are properly All connections are properly soldered providing low resistance connections vital in all precision tests. The Modded Finger Grip Tips are provided with rivets for easy removal of wire. Length of test leads is 48". Handles are 5" long.

List \$1.75 No. 373.....

NEW ICA SLIM-LINE TEST LEADS

Long vinyl-insulated shaft Long vinyl-insulated shaft permits probing in closely wired circuits without fear of shorting. Black and red Tenite handles. 48" wire lead. With molded phone tip plug.

...List \$1.50 Pr.

No. 438....





ICA Slim Handle Test Leads IGA Slim Mandle lest Leads Made of sturyly Tenite Handles, 50" of Kinkless Live Rubber wire. Handles 6" Long-verall Length 7". Prods have pointed large phone tip plugs. No. List 313—Phone Tips on end. \$1.25 315—Alligator Clips on end 1.40



ICA UNBREAKABLE TEST PRODS
Long Metal Prod with Shock-proof Rubber Handles
One end has standard needle
point Tips. Other end has Insuitated Solderless Plugs. Supplied with 50" Kinkless Rubber Wire

ber Wire.

No. 332—With Phone Tips
Non Insulated List \$1.00
No. 331—Insulated Solderless
Plug Ends...List \$1.15



RADIO PRODUCTS



ICA ALL PURPOSE TEST LEADS

Made of sturdy Tenite Tubing, Slim handles, 6" long, Overall length 74", Rubber covered wire 50" long.

With Interchangeable Tips

The state of	OMM	No. 312—Complete	Kit	\$2.50

NON-KINK FLEXIBLE TEST LEAD WIRE

Flexible rubber covered wire that will not kink or wear down in service. Consists of very fine tinned stranded copper wire with a heavy wall of live rubber insulation.



No. 307-100	ft.	spool,	BlackList \$4.00	
No. 309-100	ft.	spool,	Red,List 4.00	

ICA FENOLINE PHONO, NEEDLE POINT TEST PRODS

With Removable Chuck

5 Inch Test Prod No. 389R—Red List \$.40 No. 389B—Black List .40 7 Inch Test Prod No. 334R—Red List .40 No. 334B—Black List .40

ICA SOLDERLESS PLUG TEST PRODS

With Solderless Plug Chuck

410 6							
51/4 Inch Long Prods							
No. 390R—Red List No. 3908—Black List	\$.40						
No. 3908—BlackList	.40						
71/4 Inch Long Prods No. 335R—Red List No. 335B—Black List							
No. 335R—RedList	.50						
No. 335B—BlackList	.50						

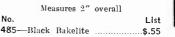
Latest Television Servicing Tools

HIGH VOLTAGE ICA HEAVY-DUTY BAKELITE TEST PROD HANDLES



No. 480—Black BakeliteList \$1.15

HIGH VOLTAGE HEAVY-DUTY BAKELITE TEST PRODS



ICA HEAVY-DUTY TEST PRODS



Slim tapped Tenite handle fitted with threaded heavy-duty phone tip. Length 5". No. 387R—RedList \$.50

No. 387B-Black List .50

ICA SAFE-T-TESTER

A new, unique, non-shorting prod that makes contact only when pressure is applied to barrel. Ideal for cramped spaces where probing is necessary. Specially applicable to television needs.



No.	446.	List	\$1.50
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HEAVY DUTY TEST LEADS

Engineered for TV's high voltage measurements. Insulated to withstand 15,000 volts D.C. Thick-walled bakelite handles with



finger guards. 48" heavy duty cable. No. 4317.....\$3 per pair Dealer Net

RF AND SIGNAL TRACER PROBE

Germanium Crystal Circuit. Assures accurate analysis of circuit defects. May be used with audio amplifier for audible tracing or with V.T.V.M. for



RF and AF measurements. Low input capacitance. The ideal probe for the audio section of television circuits. The sturdy bakelite barrel has sealed tenite ends with solderless phone tip and includes 48" RG59/U coaxial cable with phone plug and 18" rubber covered ground lead with alligator clip.

No.	4310	\$7.50	Dealer	Net

TRAN-ALIGNER

Newly designed all-insulated aligning tool for standard IF and RF and "K-Tran" midget transformers. Trim fiber; milled at one end, screw driver at other end. 21/2" length blade;

No. 978..... List \$.75 each

TUNING WAND



Extra thin diameter to fit small coil openings in television sets. Flexible vinylite. Brass insert in one end; molded powdered iron core in other end. Lowers or increases inductance. Suitable for "Zenith," etc., TV sets.

No. 6163.....List \$1.00 each

DEEP-NIB ALIGNER

Tough fibre. Metal nib entirely insulated and

set within barrel end. For tuning IF and RF

shielded coils and trimmers. Small enough to

fit under television tubes without removing.

No. 6156.....List \$.50 each

Length: 2 1/2" x 1/4" diameter.

"BIG STRETCH" ALIGNER

Extra thin, extra long (9"), bone fibre aligning tool, 6½" blade. Specially designed for adjustment of nested iron cores of "Admiral," "Zenith" and similar make TV sets. Permits use on RCA front ends and normally inaccessible areas.

No. 6162 List \$1.00 each

SLIM-ALIGNER



Alignment tool with extra thin recessed blade and slim metal shaft for cramped probing in television receivers. Fiber handle. Especially suitable for "Admiral" and similar make television sets.

No. 6161 List \$1.00 each

(Bard S) (Since)

STUB ALIGNER Ideal when cramped space demands short in-

sulated tuning tool. Exposed nib for screw

driver type controls not carrying high voltages.

TELEVISION "CHANNEL TUNER"

A narrow all-insulated screw driver of machined fiber. Ideal for deep, inaccessible tuning. Overall: 7" Length. 1/8" blade on 4 1/4" shaft.

No. 6157.....

TUNING WRENCH



Insulated fibre tuning wrench with extra thin recessed blade. Extra thin screw driver blade on other end (4 ¾ " L.). Tenite handle. Espe-cially designed for "Zenith" TV sets, etc.

No. 6164.....List \$.75 each

DUAL ALIGNER



Dual purpose narrow shaft, fibre alignment tool for trimmers, IF transformers, etc. screw nib on one end; metal screw driver on other end.

.....List \$.75 each | No. 6166.....List \$.75 each

ICA GRIP-RITE MOLDED PHONE TIP PLUG



Replacement	for	ICA	and
Weston — as	well	l as	other
make Test Lea	ıds.		
No.			List
868—Red			\$.50
869-Black			50

ICA PHONO NEEDLE CHUCKS

869-Black

Push' on type can be forced into handles — Threaded type can be screwed into handles. Machined of brass, nickel plated with needle
point. No. List
508—Push-on Type, Overall size 1"\$.15
509—Threaded Type, Overall size 1"
HEAVY-DUTY PHONE TIP

n	EATI-DUI	IIIONE	• • • •	
	Made of h	l plated fi	inish. Ur	sed on
	test leads length is	, pr o ds, 1 ½ ″.)	etc. (()verall
No. 361—1 No. 360—9	Heavy-Duty		List 9	.13



ICA CHROME SILVER DIAL PLATES
2%" and 4" diameter. Two ty
calibrated 180 degrees 0-100
325 degrees, 0-100.

No.	Degrees	Dia. Dial	Calib.	List
2196	325	234"	0-100	\$1.15
2197		234 "	0-100	1.15
2194	325	4"	0-100	1.40
2495	180	4"	0-100	1.40

ICA BRASS BLACK SATIN FINISH DIAL PLATES

W	ith Etche	d Silver Dia.	Numera	ils
No. 2230 2232	Degrees 325 180	Dial 31/8" 31/4"	Calib. 0-100 0-100	\$.60 .60
2233 2234 2236	180 325 180	2" 2" 2"	100-0 0-100 0-100	.45 .45 .45

ICA CHROME SILVER DIALS

With Finger Grip Flange Knobs





ICA MINIATURE DIALS

Beautiful Chrome Silver dials with black etched num-erals. Finger grip black knob. Only 15%" diameter. Fit 14" shafts.

No.			List
2164-10-0-180			\$.85
2165-10-0-270			.85

ICA CHROME SILVER DIAL PLATES

Attractive grain satin finish. Black Etcho Engraving on Chrome Silver Background Plates.

ground r	lares.			1/10
Degrees	Dia. Dial	Calib.	List	61
180	2"	0-100	\$.80	
325			.80	1
180				~
325				
325	4"	0-100	1.40	
	Degrees 180 325 180	Degrees Dial 180 2" 325 2" 180 3½" 325 3½" 180 4"	Dia. Degrees Dial Calib. 180 2" 0-100 325 2" 0-100 180 3½" 0-100 325 3½" 0-100 180 4" 0-100	Dia. Degrees Dial 180 2" 0-100 \$.80 325 2" 0-100 .80 180 3½" 0-100 1.25 325 3½" 0-100 1.25 180 4" 0-100 1.40



ICA ETCHED DIAL PLATES

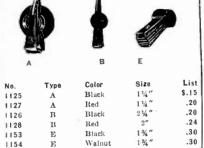
RECTANGULAR TYPES

Made of brass—finished in black with etched silver markings. Calibrated for 300 degree rotation. Marked 0 to 10. Will fit on %" bushing. Size 2\%" x 1-11/16".

No. Marking List 2244—Record\$.30	9
2244—Record	. RECORD .
2247—Tone	ot worded)



RADIO REPLACEMENT AND INSTRUMENT KNOBS







	No.	Type	Color	Size	List
	248	J	Black	1 1/4 "	\$.20
	249	J	Black	11/2"	.22
I	1076	K	Walnut	3/4 "	.18
	1049	L	Walnut	18"	.16
	1050	L	Walnut	1"	.18
	1174	M	Black	1 8"	.20
	1089	N	Walnut	18"	.18
	1090	N	Walnut	1 1/8"	.20
	1147	U	Black	7/s "	.18
	1148	U	Walnut	7⁄8 ″	.18
	1077	\mathbf{T}	Walnut	%"	.15
	1078	${f T}$	Walnut	7/s "	.18
١	1272	v	Black	3/4"	.20
	1273	v	Walnut	3/4"	.20

ICA KNOB ASSORTMENTS

Walnut Bakelite JUNIOR ASSORTMENT



No. 1048-50 Knobs. Contains 5 each of 10 popular type knobs listed above. List \$8.90

MASTER ASSORTMENT No. 1043—100 Knobs, Con-tains 12 different type pop-ular knobs including pointer knobs.

List \$17.50

ICA INDICATING PLATES

Made of heavy brass with black satin background. Silvered "Etcho Gravured" numerals and lettering. To" center mounting hole. 13 "Diameter. 22

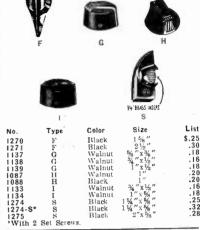
	1 's" Diameter.	
No.	Degrees	List
	1 to 6	\$.35
	1 to 5 (Volume) 325	.35
2451-Marked	1 to 5 (Tone) 325	.35
2452-Marked	1 to 10325	.35
2453-Marked	Off-On-with arrow325	.35

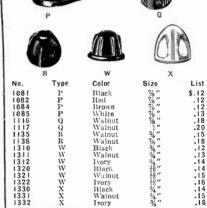
ICA NAME PLATES

I-INCH ROUND

No. 2237—For "Microphone" No. 2238—For "Phono" No. 2239—For "On Off" List \$.20







ICA FINGER-GRIP POINTER KNOBS

Moulded of black bake-lite with ¼" hole. Pointer type knobs have white in-dicators, flange type knobs have white indicating line.
With 1/4" Brass Inserts

		•	•			′	•			_	•	-	-		•		-	•		•		B	
TYPE	A	١-	_	_'	W	/	1	rI	н		P	C)	ı	N	T	E	Ī	1				
1 1/4 "																					List	\$.60	
—i % " —2 % "															•						List	.75	
—2 ¾ ″		٠	٠			٠	٠	٠	٠	٠	٠		٠			٠		٠	٠	٠	List	.95	
TYPE	,	Δ	_		L	E	5	5	5	ı	P	O	1	١	ı.	r	E	R					
1 ½ ″ 1 ½ ″				į.																	List	\$.45	
—1 5/ ₆ "																					List	.55	

No. 1169-238"		List .75
	B-WITH FLANGE	
No. 1171-216"		List \$.75
	Knobs also furnished	

screws. Order by adding "S" to each number. ICA VERNIER DIAL MARKER



No. 1165

Complete with self - tapping screws for mounting on metal, wood, bakelite or brass panels.

2185—For 2190—For 2191—For 2192—For "-325° Dials...
"-180° Dials...
-325° Dials...
-180° Dials... . List \$.50 . List .50 . List .50 . List .50 23/4 23/4 4"

RADIO



Current Cap.

List \$.50

ICA
"Insulex"
R.F.
CHOKE
COIL Silk Wire Wound

Supplied with wire with wire leads for mounting.

ICA "INSULEX" R.F. CHOKES



No

Cat. No. 1777 1775 1774 1772	Induct- ance 2.5 5.5 10 30	D.C. Resis. 30 57 7.8 136	Current Cap. 150 150 150	List \$.60 .75 .80
1773 1771	60 80	196 222	125 125 125	1.15 1.25

IRON CORE HIGH "Q" R.F. CHOKES

Ind.	D.C. Res.	
M.H.	ohms	List
2.5	17	\$1.20
3.5	22	1.30
5.5	28	1.35
10	5 5	1.35
30	83	1.60
60	142	1.95
80	168	2.10
125	214	2.60
	M.H. 2.5 3.5 5.5 10 30 60 80	M.H. ohms 2.5 17 3.5 22 5.5 28 10 55 30 83 60 142 80 168



ICA TRANSMITTING R.F. CHOKES Tapered Sections

Wound on Insulex low-loss core. Has a continuous universal winding in five tapered sections. Designed for maximum impedance in

amuccui	Danie	110111 100	meters do	*********
	Ind.	Cur.	Res.	- 1
No.	M.H.	Ma.	Ohms	List
266	2.8	1000	5	\$2.75 2.50
267	5.3	600	12.5	2.50

HEAVY DUTY TRANSMITTING CHOKES



No. 280 278	Ind. M.H. 2.5 5.6	Cur. Cap. Ma. 1000 600	D.C. Res. Ohms 5 12	List \$2.50 2.25
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INSULEX INSULATORS



Made of WHITE Glazed Insulex. This new line of insulators meets the demand for a perfect, non-porous low loss product. Used by broad-casters, amateurs, ex-perimenters and set-builders, All feed-thru have cork washers

	nave o	cork was	hers.				
	STAND O	FF INSU	LATORS				
No.	Description	Height	Base Size	List			
2300	Little Pete	1″	1/2" x 7/8"	\$.12			
2301	Junior Pete	1 % "	34" x 1 1/4"	.15			
2302	Big Pete	1 1/8"	1" x 11/5"	.18			
2303	Beehive	2 %"	2" Diam.	.25			
2304	Jack Type	1 1/2"	1" x 11/2"	.25			
FEED-THRU INSULATORS							

2304	Jack Type	1 1/2"	1" x	$1\frac{1}{2}$ "	.25
	FEED-THR	U INSL	JLATOF	es:	1
			Base	Mtg.	- 17
No.	Description	Ht.	Diam.	Hole	List
2305	Sub-Panel	1 3/4 "	5/8"	5,11	\$.20
2306	Sub-Panel	2"	3/4 "	3/8"	.25
2307	Sub-Panel	2 3/4 "	7/8"	16"	.28
2334	Large	- 74	/8	16	.20
	Sub-Panel	4"	11/2"	5/. "	.70
2320	Jack Type	1 3"	3/4"	5/8" 7" 16" 7"	
2321	Jack Type	2 16"	74.11	16,,	.35
-	back Type	216	7/8"	16	.40

ICA MIDGET PRECISION CONDENSERS



Better mechanical design insures constan-cy of calibration and uniformity between units. Ball - bearings units. Ball - bearings on both ends of shaft insure long life with-out wear or side play. Heavy brass springs make direct contact with rotor shaft, in-suring a clean wiping contact at all times.

Single Gang Condenser

533 542	135 mmfd. 365 mmfd.	\$3.00 3.00
538 534	Two Gang Condenser 135 mmfd. 365 mmfd.	3.50 3.50
532 531	Three Gang Condenser 135 mmfd, 365 mmfd,	4.50 4.50

SUPERHETERODYNE TYPE

Designed for 455KC IF. RF section is 27 plates; 435 Mmfd. Oscillator Section is 19 plates; 173 Mmfd. Measurements similar to two gang condensers shown above.

N	545	List	\$3.50
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ICA CERAMIC PADDING CONDENSERS



Compact, yet rugged Padding Condensers. Designed for aligning tandem condensers, short wave band switch coils, antenna trimmers, etc. Uses high grade Mica and Phosphor Bronze Spring contacts.

No.	Min. Cap.	Max. Cap.	List
611	4.0 mmfd.	40 mmfd.	\$.50
612	12.0 mmfd.	100 mmfd.	.50
613	70.0 mmfd.	350 mmfd.	.55
614	160.0 mmfd.	500 mmfd.	.55

GIANT INSULEX INSULATORS

Heavy Huty-Will Withstand 10,000 Volts

No.	Description	Ht.	Base Diam.	Mtg. Hole	List
**2331	Stand Off Stand Off	4 ½ ″ 4 ½ ″	3 ½ "	1/4 " 1/4 "	\$.95 .90
**2333	Feed thru Feed thru	4" 4"	2" 2"	1/4" 7/8" 7/8"	.95
*With W	ing Nuts	**Wi	th Screv		

ICA AIRCRAFT TYPE INSULATOR

A strain insulator made of Insulex, Particularly adaptable for aircraft, automoor aircraft, automobile and boat installation. Two ½" mounting holes. Distance between holes ¾".



No. 2325... List \$.12

CERAMIC RODS

Made of Alsimag, Suitable for mounting insulators, condensers, coils, etc.

Available in two lengths. No. Lgth. Dia. Tap. List 2310 1¼" ½" 6-32 \$.28 2311 3¾" ½" 6-32 .40



ICA BASE-MOUNTING BAKELITE SOCKETS

No.			lst
2480-4	Prong	\$.	45
Z4010	rrong		50
2402	1'rong		55
2489—8	Prong	comb. large and small	60
2490—C	ontact	for above Sockets \$2.5	0C



ICA "INSULEX" BASE MOUNTING SOCKETS

Especially adapted for ultra short-wave work and transmitters.

No.	List \$.90 .90 .90 .00 .00 .00 .00 OCTAL 1.00
290-4 Prong	.90
291—5 Prong	.90
292—6 Prong	1.00
294—Comb. 7	Prong, large and small 1.00
JUU-8 Prong	UUTAL 1.00

BAKELITE WAFER SOCKETS



Wafer socket of punched bakelite for miniature seven pin button base tubes. Phosphor bronze contacts. Standard mounting centers.

No. 1122

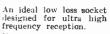
.....List \$.15

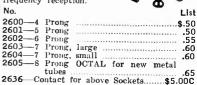
BAKELITE WAFER SOCKET

Similar to No. 1122 above but with grounding strap. No. 1124

112.	*	LIST 3-1

WAFER SOCKETS







ICA BAKELITE WAFER SOCKETS

	3	
No.		List
11184	Prong	1.13
1096—5	Prong	.13
10956	Prong	.13
1119—7	Prong, small	.15
11207	Prong, large	.15
11218	Prong OCTAL	.16
1123Lo	oktal Wafer	.16

CERAMIC BEAD INSULATORS

3/8	"" Di	am.						
Used ines		construc	ction	of	short	concentri	c	link
No. 2	2315	(100	bead	s).		List	\$	1.25

ACORN TUBE WAFER SOCKET



Of Navy approved ceramic with silver plated contacts. Can be easily inserted and removed and no amount of vibration will cause the tube to become loose.

No. 961		List \$1.00
No. 2466-Contact	only	\$2.50C

ICA ROTARY SWITCHES

Rated 3 Amps. at 125 Volts. Overall Length of shafts 1½". Made by H & H for ICA. Underwriters

	Approv		
##A		Threade	d
	No.	Shank	Description
	1228*	3%″	S.P.S.T.
	1229*	1"	S.P.S.T.
The state of the s	1286	3/8"	S.P.D.T.
	1287	1"	S.P.D.T.
	1288	3/8 "	D.P.D.T.
	1289	1"	D.P.D.T.
11 15 15 15 15 15 15 15 15 15 15 15 15 1	*Rated	30 Anı	ps. at 250 V.

MOLDED BAKELITE SOCKET

For Miniature Tubes lack molded general Black bakelite purpose with mounting saddle.

Standard mounting centers. Phosphor contacts. bronze

	acces.				
No.	2475	 	 	List	\$.20
				filled.	

ICA TOGGLE SWITCHES

Furnished in Nickel or Antique Bronze, Capacity 1 Amp. 250 Volts, 3 Amps. 125 Volts, Mfd. by H & H for ICA.

	Shank		•	_
No.	Length	Description	Finish	Net
1230	3/8"	S.P.S.T.	Nickel	\$.50
1232	3%"	S.P.S.T.	Bronze	.55
1233	3/4 "	S.P.S.T.	Bronze	.60
1235	94	S.P.S.T.	Nickel	.55
1236	3/8 "	S.P.D.T. S.P.D.T.	Nickel	.65
1237	34.71	D.P.S.T.	Nickel	.75
1365	34. "	D.P.D.T.	Nickel	.95
1366	3/4"	D.P.D.T.	Nickel	1.15

ICA MOLDED BAKELITE SNAP-ON SOCKETS



Octal-I oktal

Mounted in cadmium plated steel "Saddle." Equipped with 4 grounding lugs on saddle—Positive grip contacts.

8 1		
No. 2470—Octal Socket	l ict	¢ 15
NO. 2770 TREAT MOCKET		ψ , \pm 3
Mtg Center 112"—Chassis Hole	11//	
ang Center 1 2 —Chassis frote	1 7/8	

No. 2471—Loktal Socket List \$.20 Mtg Center 1 15"—Chassis Hole 1"

BAT-HANDLE TOGGLE SWITCH

Made by H & H. Identical to toggle switches listed above, except that handle is longer and shaped like a baseball but.
Less on and off plate.
Nickel plated only—7/16" shank.
Packed 5 in a standard carton.





ICA BAKELITE KNIFE SWITCHES

Hardware of brass, heavily nickel-plated. Mounted on highly polished bases of black BAKELITE. Firm contact assured.

No.	Description	List	No.	Description	List
1216	S.P.S.T.	\$.85	1220	3 P.D.T.	\$2.00
1217	S.P.D.T.	1.00	1221	4 P.S.T.	2.50
1218	D.P.S.T.	1.15	1222	4 P.D.T.	3.00
1219	D.P.D.T.	1.35	1364	5 P.D.T.	3.50
1360	3 P.S.T.	1.85			

LL . . . COMPACT. Switch dimensions: 1½" x x ¼". S.P.S.T. includes chrome mounting plate. SMALL

No.	Description	List
1255	S.P.S.T.	\$.35
1259	S.P.D.T.	.40
1260	D.P.D.T.	.50
1264	D.P.S.T.	.45

ICA SLIDER SWITCHES



MINIATURE BAKELITE SWITCHES

Can be mounted on panel or base. Black Bakelite base—highly nickel-plated brass parts with insulated handles.

2223 S.P.S.T. 1 1/4 " x 1/2" 2224 S.P.D.T. 1 1/4 " x 1/2"	List
2224 S.P.D.T. 1 1/4 " x 1/4 "	\$.35
	.60
2225 D.P.D.T. 1¼"x1"	.75
2226 D.P.S.T. 1 ¼ "x1"	.70



ICA HI-POWER SWITCH

Push Button Type

Designed to break pri-Designed to break primary circuit when rack door is open. D.P.S.T.
Made by H & H for ICA. Capacity 12 Amp. 125 Volt. Overall size 1%" long. %" wide, 34" high. 7/16" shank.

No. 1280

ICA PUSH BUTTON SWITCH

Single pole 2 circuit momentary switch. One circuit is "ON"; other normally "OFF." One Amp., 125 Volt, made by H & H for ICA.

Shank 5%" long.

List \$2.25 No. 1282



List \$.95



ICA EXTRA HEAVY DUTY SWITCH D.P.D.T. With Neutral Center

An extra large heavy duty, Double Pole, Double Throw Switch with neutral position in the center for use in heavy current circuits such as transmitters, power amplifiers, motors, etc. Contacts have fast "break" which reduces the tendency to arc. Rated at 10 Amps., 125 Volts. Size of switch case, 2½" long, 1" high, 1½" wide. Mounting sleeve diameter ¾".

List \$5.50 No. 1283.....



"ON-OFF" PLATE

For Toggle Switch Nickel Plated No. 1300 List \$.04

Antique Bronze No. 1300BR List \$.05

ICA POWER SWITCH

(Toggle Type)

Characteristics and di-mensions same as No. 1280 described above.

No. 1281 List \$1.50



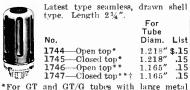
ICA ROTARY CANOPY SWITCH

Single pole switch 1/4" shank with brown bakelite knob and 6" leads—1 ampere—250 volts.

No. 1257..... List \$.50



GT AND GT/G TYPE TUBE SHIELDS



- **For GT tubes with small metal base. †For Loktal tubes.

ICA 807 TUBE SHIELD



For use with Transmitter Pentodes, and Tetrodes, to prevent oscillation. Can also be used on RK 20, RK 39 and 804 tubes. \$.60 1545



ICA GRID CAP SHIELDS

(For Metal Tubes)

Fits firmly over grid cap, affording complete shielding. Slotted cap permits passage of grid wire.

No.	List
1552 1558—With Bakelite Insert	\$0.10
1558-With Bakelite Insert	

ICA COIL SHIELDS

With Detachable Base

A sturdy coil shield made of aluminum with a detachable base.

No.	List s 60
1539-21/8" x 3" High	\$.60
1540-2½" x 3½" Hi	gh
1549-3" x 31/2" High	.7 5



FORM FIT TUBE SHIELDS

A tube shield that assures a snug. positive fit. Vertical grooves provide flexibility. Includes ground clip as illustrated. Protects tubes against excessive vibration.

No. 1727B-	-For	GT;	GT/G	and	Loktal	tubes.
Length	21/2"	7			Lis	it \$.15

No. 1729B—For GT and GT/G tubes. Length 23/4" List \$.15



ICA ALUMINUM TUBE SHIELD

For 55, 57, 68, etc. type tubes No. 1708-114" mounting centers.....\$.40 1709-11/2" mounting centers40

ICA SHAFT COUPLINGS

AND

EXTENSION RODS

Brass Couplings and Reducers

No.	Length	Hole	0.D.	List
2105	3/4"	¼" coupler	1/2"	\$.20
2106	3/4"	%" coupler	10"	.20
2107	3/4"	3%" to 1/4"		
		coupler	16"	.20
2111	1 1/8"	%" to %" shaft	1/2"	.20
2112	1 1/8"	¼" to %" shaft	2"	.20
2113	1 1/8"	%" to ¼"		
			½″	.20
1CA	Fencilee	Countings at	od Dad	116025

2109	1/4	%" to 1/4"		
		coupler	16"	
0110	1 1/ //	1/11 4- 1/11		

Length

34"

No.

.20 %" to % 1/2" .20

Hole

¼" coupler

O.D. List

1/2" \$.20

Long Extension Couplings

Made	of Brass	with extra	long exte	ension
No.	Length	I.D.	0.D.	List
2123	1%"	1/4"	1/2"	\$.25

ALUMINUM IDLER PULLEYS



Precision made. Distortion free non-warping. Premits closer tolerances. Supplied in any quantity in any type—with or without shoulders. Listed are typical sizes without shoulders, hole diam. 128".

No. 601	0 ,D.	Cord Diam.	List
	78	1/4	\$2.00C
602	16	16	2.20C
603	1/2	3%	2,30C
604	5/8	1/2	2.50C
605	3/4	5/8	3.00C

BAKELITE AND FENOLINE TUBING

ICA tubing is strong me-chanically, has extremely low electrical absorption and is highly resistant to moisture. Absolute perfec-tion in winding of coils is assured by the use of ICA tubing—thus affording relief from complaints or failure in performance.



Finished in Natural and Black Colors Small sizes up to one inch in Black only.

"" Wall Thickness, Full Lengths.

Approximately 36 to 48"

BAKEL	ITE	FENOL No. O.D.	INE
No. O.D.	Per Ft.	No. O.D.	Per Ft.
100—¼"	\$.95		\$.85
101—%"	1.15	162—¾"	90
102—7″	1.20		1.00
103—½"	1.30		1.05
104—5/8"	1.40	165—-5%"	1.10
105—¾"	1.55		1.15
106—-7/8"	1.65		1.25
147—1"	1.75		1.15
	1.95	135—11/4"	1.35
149-11/2"	2.05	13611/4"	1.40
150134"	2.25	137—1¾″	1.55
151—2"	2,50		1.70
152-21/4"	2.70	139-21/4"	1.85
153—2½"	3.15		2.05
154-23/4"	3.50	14123/4"	2.45
1553"	4.00	1423"	2.65
156—31/4"	4.20	143-31/4"	2.85
157—3½"	4.50		3.35
158—3¾"	4.50		
159—4"	5.50		

ICA LARGE LOW-LOSS RIBBED COIL FORMS AMBER BAKELITE 15%" Diameter 35%" High

No.						Lis
1051-	-4 Prong					\$.60
1052-	-5 Prong					60
1053-	6 Prong	Ċ	Ċ	i	i	.65

ICA SMALL RIBBED COIL FORMS

Made of Amber Color Bakelite 13/8" diam., 21/4" high



ICA INSULATED BUSHINGS



ICA BRASS EXTENSION RODS No. 2117 6" Length 1/4" O.D. List \$.20 No. 2118 12" L. 1/4" O.D. List .40 FENOLINE EXTENSION RODS No. 2120 6" Length 14" O.D. List \$.30



TRANSMITTING
COIL FORMS
Made of Low - Loss
RX-47 Dielectric.
Rugged and durable. Rugged and durable. Amber color. Size of body affords 3¼" of winding space.

2670 —4	Prong	List	\$1.00
2671— 5	Prong	List	1.05
2 672—6	Prong	List	1.10
	2671— 5	2671-5 Prong	2670—4 ProngList 2671—5 ProngList 2672—6 ProngLlst



ICA SMALL BAKELITE COIL FORMS 11/4" diam., 21/4" high

No. List 1108B-4 Prong ...\$.45 1113B-5 Prong ...45 1114B-6 Prong ...45

ICA SHORT WAVE AND BROADCAST PLUG-IN COILS



Wound on Low-Loss Bakelite Forms

Nn. 4 PRONG-2 WINDINGS LIST 1471-Set of 4 short wave coils

-covering 91/2 to 174 Meters\$3.15

1473-Set of 2 Broadcast coils covering 160 to 550 Meters 2.50

ICA BAKELITE FLEXIBLE SHAFT COUPLING

Flexible phosphor bronze spring contact mounted on a round bakelite disc. 1 $\frac{1}{8}$ diam. Has $\frac{1}{4}$ bushnig.



ICA INSULEX FLEXIBLE SHAFT COUPLING

Flexible phosphor bronze spring contact. Mounted on Insulex disc for efficient low-loss coupling. 1 $\frac{1}{6}$ " diam. $\frac{1}{4}$ " bushing. No. 2143



ICA PANEL BEARING ASSEMBLY

W:11 64 on					
Will fit on	paneis	up to	16	tnickness.	
No. 1248—Overall	length	3"		List	\$.40
No. 1249—Overall	length	6"		List	50
No. 1250-Bearings	only			Liet	10



BAKELITE BUSHINGS

Molded Bakelite Bushings for complete insulation.
Strong seamless threads.
Heat resisting to 300 F.
Complete with stamped lock nuts.



STOCK SIZES OF BLACK AND BROWN FENOLINE TUBING

Individual lengths tubing in following diam: 1"; $1\frac{1}{4}$ "; $1\frac{1}{4}$ "; $1\frac{1}{4}$ "; $1\frac{1}{4}$ "; 2^{**} ; 2^{**} ; 2^{**} ; 2^{**} ; Wall thickness 1/16".

No. 2131-List 2131—3" long—1" O.D. to 3" O.D. 2132—4" long—1" O.D. to 3" O.D. 2133—6" long—1" O.D. to 3" O.D. \$.65 .80 1.15 When ordering, specify exact diameter.

SPECIAL LENGTH RAKELITE TURING

Cut to Order - Wall Thickness to 1/16" Outside diameters range from 1" to 4". Prices on request. Other diameters and thicknesses quoted on request.

	ICA "INSULOID" RODS			
No.	Color	Size	List	
2175	Black	12" x 1/4"	\$.45	
2176 2179	Black Black	24" x ¼" 12" x ¾"	.80 .60	
2180	Black	24" x 3%"	1.20	
2183 2184	Black Black	12" x ½" 24" x ½"	.80 1.60	

BAKELITE RODS FENOLINE RODS Lengths of 18" to 24"

		Conficus of	TO. 10	44	
No. 175 178 176 177	Diam. 1/4" 1/4" 1/8" 1/2"	\$1.30 ft. 1.50 ft.	No. 168 169 170	Diam, 1/4" 3/8" 1/2"	List \$.80 ft. 1.10 ft. 1.40 ft.

ICA FLEXIBLE SPAGHETTI TUBING

20 Foot Lengths



A flexible tubing, heavily varnished, in attractive colors. Average dielectric strength, 5000 volts. Will accommodate from No. 10 to No. 18 Wires

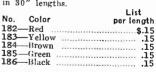
Furnished in one length
—20 feet long on handy alooga

lo.	Color		List
10	Red	Per Spool	
11	Yellow	Per Spool	1.25
12	Brown	Per Spool	1.25
13	Green	Per Spool	1.25
14	Black	Per Spool	1.25
nη	Foot Speels since	1 141 1 1 1	

500 Foot Spools, spaghetti tubing, same grade and colors as above. Specify color per spool. No. 197.....List \$28.50

ICA SPAGHETTI TUBING

For No. 10 to No. 18 gauge wire. Guaranteed not to crack. Furnished in 30" lengths.





SMALL SIZE SPAGHETTI TUBING
 200—Red
 \$.15

 201—Yellow
 .15

 202—Black
 .15

LARGE SIZE SPAGHETTI TUBING Supplied in 36" lengths. Diameter 9/64" I.D. x 3/16" O.D. No. 196—Supplied in black only List—per length \$.50

ICA GIANT SLEEVING

Made of high voltage insulation saturated cambric material. Inside diameter %". For Insulating Resistors, Small Condensers, Wire Cables. Leads, etc. 36" lengths. No. 198.....List \$.50

RUBBER INSULATED GRID CAPS

For Transmitting Tubes

New improved type. Insulation made of special soft rubber over spring bronze.



For New Metal Tubes
-With 12" Lead



Improved type for standard and Insulation transmitting tubes. Sturdy cadmium plated brass clip. Furnished with 12" wire.



For Standard Glass Receiving Tubes with small caps

No. 680—Red	List	\$.2 5
No. 681—Black	Llst	.25







874--

1553



For all types of tubes. Positive contact. caps are hot tinned ready for soldering.	All grid
No.	List
1550—For standard glass receiving tubes	e12 50M

SPRING ACTION GRID CAPS

.20

with small caps (.360 dia.) \$12.50M 1551—For tubes with miniature caps (.250 dia.) 12.50M 1553—For glass tubes 1.50C 1554—For glass tubes 1.50C



ICA TERMINAL STRIPS

Made of 3/32" heavy black Bakelite, engraved in white. Terminals are brass cadmium plated.

No.	Terminals	Marking	Mtg. Ctrs.	Size	List
2420	2	Plain	1 1/2	% x 21/4	\$.18
2419	2	A & G	1 1/2		.18
2418	$\frac{1}{2}$	Output	1 1/2		.18
2417	$\overline{2}$	Input	1 1/2		.18
2414	3	Plain	$\frac{2}{2}$	7/8 x 2 3/4.	.27
2415	3	1, 2, 3		· ·	.30
2413	4	Plain	2 1/2	% x 3 %	.36
2408	4	1, 2, 3, 4	2 1/2		.40
2405	- 5	Plain	3	% x 4	.45
2406	5	1, 2, 3, 4, 5	3		.50
2404	6	Plain	3 1/2	% x 4 %	.54
2402	6	1.2, 3.4, 5, 6	3 1/2		.60
2412	7	Plain	4	% x 5 ¼	.63
2411	7	1, 2, 3, 4, 5, 6, 7	4		.70
2410	8	Plain	4 1/2	% x 5 ¾	.72
2409	8	1.2, 3, 4, 5, 6, 7, 8	4 1/2	4.	.80
2424	9	Plain	5 5	% x 6 %	.81
2423	9	1, 2, 3, 4, 5, 6, 7, 8, 9	5		.90
2422	10	Plain	5 1/2	% x 7	.90
2421	10	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	$5\frac{1}{2}$		1.00

BAKELITE TERMINAL MOUNTING STRIPS



Mounting tie strips for fastening Resistors, Condensers, etc. Mounting Lug hole dia-meter 140". Type A shows non-ground mounting lug. Type B shows combination grounding-mounting lug:



Туре В

			Mtg.	Mounting	
No.	Type	Terminals	Centers	Lugs	List
2434	A	1)	1	\$3.00C
2455	i	î	One	1	3.00C
	A	9	Hole	1	4.00C
2435	B	5	7.0.0	ī	4.00C
2456	D A	2	11/2	2	7.00C
2436	A	9	1 1/2	2	7.00C
2457	В	3	1 7/8	9	8.50C
2437	A	4		9	8.50C
2458	В	4	1 %	2	10.00C
2438	A	5	2 1/4	2	10.00C
2459	В	5	2 1/4	Z	12.00C
2439	A	6	1 1/8	z	
2460	B	6	1 1/2	2	12.00C
2440	A	7	1 1/2	2	13.50C
2461	В	7	1 1/2	2	13.50C
2441	A	8	1 7/8	2	15.00C
2462	В	8	1 %	2	15.00C



No. 2425—Terminal	Lugs or	aly ((less	screws)List	\$6.00C
No. 2426—Terminal	Screws,	3/8″	long	List	1.50C

INSULATED DUAL GRID CAPS

Designed for metal and glass tubes. Equipped with 12" insulated lead.



No. 877-Black..List \$.40

FUSE MOUNTINGS

Flush Type Mounting





Bakelite base For standard radio or automotive fuses. Countersunk center hole for mounting.

Equipped with two soldering lugs.	
No. 2340—Single poleList	\$.20
No. 7201-Double poleList	.35

Panel Type

Takes standard type radio—automotive fuse. Equipped with 6/32 screws for mounting on

No. 2341—Single polcList \$.25
No. 7203—Double poleList	.40

For AG 1" Long Type Fuse	
No.	List
7202-For smaller type fuse. Bakelite	
base. 13" x ½" x 1/8" Flush Mount	\$.2 0
7204—Double pole. 1 3" x 1" x 1/8" Flush Mount	.3 5
7205-Same as 7202. Panel Mount	.25
7206—Same as 7204. Panel Mount	

BAKELITE TERMINAL STRIPS

Brown bakelite 1/16" thick. Suitable light duty radio work, experimental purposes,



etc.		-	
No.	Terminals	Mtg. Ctrs.	List
2520	2	1 16	\$.10
2521	3	1 3/4	.14
2522	4	$2\frac{3}{16}$.18
2523	5	2 5/8	.22
2524	6	3_{16}^{λ}	.26
2528	Terminal Lug	& Screw only.	3.50 C

TWIN JACK STRIP



With two terminals Takes standard phone tips. Base width 18". tips. Base width $\frac{11}{16}$ ". $1\frac{11}{16}$ " between Mounting holes.

No. 2443..... ...List \$.20

TERMINAL LUGS



No.	List
2444	\$.65C
2445 #6 Hole	1.25C
2446	75C
2447	1.25C
2463	1.85C
2448 # 6 Hole- Combination	
2638 #8 Hole- Combination	 1.25C

RADIO PRODUCT

FILTERVOLT NOISE FILTER



An efficient filter for disturbances caused by electrical appliances. For use with any allwave or broadcast receiver.

Rated conservatively at 250 watts for 32, 110 and 220 volt AC or DC circuits. Can be installed either at the radio or at the source of disturbance.

Contains heavy duty R.F. chokes, large filter capacitor, and has a "PI" Filter circuit arrangement.

No. 338.....List \$7.50

ICA FILTERVOLT

Improves extremely noisy radio recep-tion due to inter-ruptions in power line caused by trical applia lights, etc. appliances.

No. 394 List \$4.50



DUPLEX FILTERVOLT

Eliminates Radio Noises Caused By-



- Electric Shavers
- Refrigerators
- Fans Elevators
- Motors, etc.

Unit is equipped with Dual outlet, both sides being filtered for noise elimination.

Packed 25 to a standard carton.

No. 90

....List \$1.50

UNIVERSAL VOLTAGE REGULATOR

Voltage fluctuation often occurs not gradually but suddenly, thus bringing a tremendous strain on the tubes. This regulator protects tubes through scientific regulation of current fluctuations. Housing, leading, leading fluctuations. Housing body and end rings are neatly constructed and of perforated japanned metal. For all Radio Sets, AC,



No. 92.....

List \$1.50

ICA 3-IN-1 RADIO TUNER



Functions as either an Antenna Tuner, Wave Trap, or Aerial Eliminator. Operates on any make or model radio set.

As an Antenna Tuner, it will improve the reception of a weak station. As a Wave Trap, it will separate interfering stations and improve selectivity. As an Aerial Eliminator, it makes unnecessary the outdoor aerial. Easily installed within a few minutes.

ICA DELUXE SIGNA-TONE

AUDIO OSCILLATOR - CODE PRACTICE SET - KEYING MONITOR



No. 4300

The ICA Signatone is a perfected Audio Oscillator, having 3 different output frequencies and a continuously variable volume control. The Audio notes are similar to those of high quality commercial CW stations.

1. CODE PRACTICE SET—A number of phones and keys may be connected for intercommunication or for classroom or radio club instruction

cation or for classroom or radio class installed in code.

2. KEYING MONITOR—An invaluable aid in improving any ham's "fist". Will follow the "bug" at all speeds. No well-equipped station should be without this keying monitor.



No. 4301

MODULATION SIGNAL-The steady note of the Signatone is ideal for adjusting both

18. MODULATOR SIGNAL—The steady note of the Signatone is ideal for adjusting both the Modulator and modulated stages of your transmitter for a maximum modulation percentage of not over 100.

18. SIGNAL TRACER—By feeding the output of the Signatone into each stage of your modulator and listening to the output of that stage, defects and "bugs" can easily be located. Complete with tube and self-contained speaker, for 110 V AC-DC.

 No. 4300—*Dealer Net Cost
 \$12.00

 No. 4301—Classroom Model (No Speaker)—Dealer Net Cost
 9.00

ICA **EAR PHONES**

Complete With Head Bands

Made of molded Bakelite and bakelite and light-weight nickel-plated metal. 2000 ohms.



No. 23-Double Head Phone.....List \$4.50

EAR CUSHIONS



Made of soft rubber. Ideal for the amateur wireless operator, etc. Used by all leading air lines.

No. 195.....List \$1.10 pr.

DOUBLE PHONE CORDS



No. Li	sŧ
192-Tips on both ends\$.8	55
193-Spades on one end, tips on other8	55

ICA TENNA-SCOPE LOOP

For Midgets or Portables

Eliminates necessity of outdoor or indoor antenna. Replaces the antenna coil in port-able or midget sets. Easily assembled.



No. 4385 List \$1.25

ICA TENNA-SCOPE



A new style built-in tuned radio an-tenna. Easily con-nected. Eliminates use of outside aerial and ground. Fea-tures: Better selec-tivity — Higher signal to noise ratio —Easily connected, no soldering.

ICA MORSE CODE RECORDS



Learn the Interna-tional Morse Code Quickly, Easily — Uses EYE - EAR Method. The Com-plete Linguaphone Code Equipment consists of 5 Dou-ble - faced, electri-cally transcribed records in durable album. Contents: 3 Tables, 10 Lessons.

No. 1800-Complete ... Dealer Net \$10.00 No. 1800R-Records only Dealer Net Ea. 1.95 No. 1800B—Booklet only Dealer Net Ea. .90

ICA "TRIPLEX"

Radio & Telegraph Code Practice Set Blinker Light Radio Signal—Telegraph No. List -Single Unit (less

batteries) \$3.25 -Double Unit (50 ... 6.85 ft. wire) ...

ICA RECORD-PLAYER SWITCH

Replacement for RCA Switch 9824A



Recommended for quickly connecting Record Players, F.M. attachments, Television attachments, ments, Television attachments, Microphones and similar devices into the audio amplifier of existing radio receivers.

No. 1740.....

RESISTOR CORDS

series of replacement resistor cords for practically all AC-DC requirements.



		-/
No.	Resistance-Ohms	List
513	135	\$1.15
514	160	1.15
515	190	1.15
516	220	1.15
517	290	1.15
518	340	1.15
519	540	1.25

UNIVERSAL RESISTOR CORD

Replacement Resistor Cord for all makes receivers. From 22 to 330 ohms on one cord. Instructions with each cord,

RADIO HARDWARE



ICA offers a wide variety of radio hardware items suitable for practically any use in the radio-electronic and



allied fields. ICA hardware is offered in standard package quan-

tities or in handsome glass display jars for convenient storing.

ROUND HEAD MACHINE SCREWS NICKEL-PLATED

Jar* Cat. No. 5000 5001 5002 5007 5008 5009 5010 5014 5015 5017	Qty.* Each Jar 100 100 75 90 80 70 50 75 40	Bulk Cat. No. 5504 5501 5502 5507 5511 5508 5509 5510 5514 5515 5517	Qty. Bulk Pkge. 1000 1000 1000 1000 1000 1000 1000 10	Description 2-56 x 14" long 4-36 x 14" long 4-36 x 14" long 4-36 x 34" long 6-32 x 14" long 6-32 x 14" long 6-32 x 12" long 6-32 x 12" long 6-32 x 1" long 8-32 x 1" long	844.00M 5.00M 5.50M 5.75M 5.00M 5.00M 6.50M 6.50M 6.00M 7.00M 9.00M
					9.00M 9.00M

BINDING HEAD MACHINE SCREWS

Jar* Cat. No.	Qty.* Each Jar	Bulk Cat. No.	Qty. Bulk Pkge.	Description	Bulk List
	_	5546	100	6.32 x 3" long	\$1.25C
5030	80	5 547	100	6-32 x ¼" long	1.25C
5031	7.5	5548	100	6-32 x %" long	1.25C

OVAL HEAD MACHINE SCREWS NICKEL PLATED

Jar* Cat. No.	Qty.* Each Jar	Bulk Cat. No.	Qty. Bulk Pkge.		Bulk List
5042†	40	5710†	100	10-32 x %" long	\$1.00C-8.50M
For Tr	ansmittin	g Racks.			

PARKER-KALON SELF-TAPPING SCREWS

Jar* ¢at. No.	Qty.* Each Jar	Bulk Cat. No. 5562	Qty. Bulk Pkge. 1000	Description No. 3 x 3 100g	Bulk List \$1.50C
3051 5052 3053 3054 5055	50 50 45 40 35	5555 5556 5557 5558 5559	1000 1000 1000 1000 1000	No. 4 x ½" long No. 6 x ¼" long No. 6 x ¾" long No. 6 x ¾" long No. 7 x ½" long No. 10 x ¾" long	1.60C 1.60C 2.00C 2.25C 2.75C

ESCUTCHEON PLATE SCREWS

Jar* Cat. No. 5182	Qty.* Each Jar 100	Cat. No. 5677	Uty. Bulk Pkge. 100	Description No. 1 x ½" long	Bulk List \$15.00M
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FLAT STEEL PLATED WASHERS

Jar** Cat. No. 5090 5091 5092 5093	100 100 100 100	Cat. No. 5595 5596 5597 5603	Uty. Bulk Pkge. 1000 1000 1000	Description For No. 6 Screw For No. 8 Screw For No. 10 Screw For ¼" Screw	Bulk List \$2.50M 2.50M 2.50M 4.50M
5093	100	5603 560 7	$\frac{1000}{1000}$	For ¼" Screw For %" Screw	4.50M 5.00M

EVERLOCK LOCK WASHERS

Jar≉	Qty.*	Bulk	Qty.		
Cat. No.	Each Jar	Cat. No.	Bulk Pkge.®	Description	Bulk List
5085	100	5592	1000	For No. 6 Screw	\$.55C-3.75M
5086	90	5593	1000	For No. 8 Screw	.60C-4.00M
5087	80	5594	1000	For No. 10 Screw	.65C-4.50M

KANTLINK SPLIT TYPE LOCKWASHERS

Jar*	Qty.*	Bulk	Qty.			
Cat. No.	Each Jar	Cat. No.	Bulk Pkge.	Description	Bulk List	
5080	125	5589	1000	For 6-32 Screw-3" thick	\$3.50M	
5081	125	5590	1000	For 8-32 Screw-33" thick	3.50M	
5082	100	5591	1000	For 10-32 Screw-3" thick	3.50M	
5083	7.5	5602	1000	For 14-32 Screw-15" thick	5.50M	

FLAT FIBRE WASHERS

Jar* Cat. No.	Qty* Each Jar	Bulk Cat. No.	Qty. Bulk Pkge.	De: Diam.	scription Thick.	Hole	Bulk List
					THICK.		46.051
5100	125	5601	1000	Ϋ́́в	16	32	\$6.25N
0100	110	5612	1000	3%	16	1/8	7.25
				1/2	1		8.001
5102	90	5609	1000		ន្ទំន	3 ⁵ 2 3 ⁵ 2	7.50N
		5626	1000	3%	16	32	
5101	100	5605	1000	3/8	16	3/2	7.50N
		5610	1000	1/2	.020	18	8.00
5104	50				.020	16	9.75N
5105	50	5611	1000	5/8	32	3/8	9.731

FIBRE SHOULDER WASHERS

Jar* Cat. No.	Qty* Each Jar	Bulk Cat. No.	Qty. Bulk Pkge.	De Overall Diam,	scription Shoulder Diam.	Overall Hgt.	Bulk List
5111 5110 5114 5115 5112 5113	50 50 50 40 50	5618 5620 5615 5619 5616 5624 5628	100 100 100 100 100 100	16 16 38 76 1/2 1/2 5/8	1,6 1,7 1,4 1,6 1,6 1,5 1,5 1,4 1,4 1,2	3 3 3 5 5 6 1/8 1/8 0 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	\$1.25C 1.25C 1.25C 1.25C 1.35C 1.35C 1.50C

CUP WASHERS

Jar® Cat. No.	Qty* Each Jar	Bulk Cat. No.	Qty. Bulk Pkge.	Description	Bulk List
5212 5213	45 20	5712 5713	100 100	Hole Size No. 8 No. 10	\$.75C-5.50M .80C-5.50M

STEEL HEXAGON NUTS - NICKEL PLATED

Jar≋	Qtv*	Bulk	uty.		
Cat. No.	Each Jar	Cat. No.	Bulk Pkge.	Description	Bulk List
5070	100	5572	1000	4-36 x 1/4	\$4.00M
		5573	1000	4-36 x 18	3.25M
5074	80	5577	1000	6-32 x 16	5.00M
5071	90	5576	1000	6-32 x 1/4	4.50M
5072	80	5580	1000	8-32 x 16	5.00M
5073	50	5584	1000	10-32 x ⅓	7.50M
5075	12	5583	1000	1/4 -20 x 1/6	1.20C
_		5579	1000	⅓-32 x ¾	1.00C
5076	10	5575	1000	3/8 · 32 x 1/2	2.00C

BRASS HEXAGON NUTS - NICKEL PLATED

Jar* Cat. No.	Qty* Each Jar	Cat. No.	Uty. Bulk Pkge.	Description	Bulk List
_	_	5564	100	4-36 x 18	\$.75C-6.00M
_		5566	100	6-32 x 1/4	.75C-6.00M
-		5567	100	6-32 x 15	.85C-6.50M 1.00C-7.50M
_	_	5570	100	8-32 x ⁵	1.75C
		5574	100	3% -32 x ½	1.730

RACK SCREW AND WASHER ASSORTMENT

Packed in ICA handy jars. Includes 20 Oval Head Screws (10-32 x %") and 20 Cup Washers (10-32).

BRASS EYELETS

Jar** Cat. No. 5172 5171 5170	Each Jar 80 90 100	Cat. No. 5672 5671 5670	1000 1000 1000	Shank .115 .125 .132	Length Te Te Te	Bulk List \$10.00M 9.50M 8.50M

NICKEL PLATED TUBULAR STEEL RIVETS

Jar Qty Bulk Qty Dia	nk Length Bulk List
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Oty* STEEL CABLE CLAMPS, PLATED

Jar ^m Cat. No.	Each Jar	Cat. No.	Bulk Pkge.	Desc	cription	Bulk List
5200 5201	35 30	5697 5698	1000 1000	Length 3/4 1/5	Diam. Bend	\$1.25C 1.50C

NICKEL PLATED SPRING CLIP

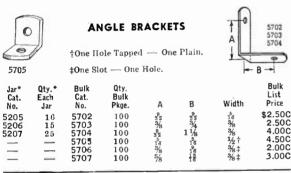
Jar* Cat. No.	Qty* Each Jar	Bulk Cat. No.	Qty. Bulk Pkge.	Descr	iption	Bulk List
5190	40	5691	100	Width เรือ	Length	\$1.65C
5191	40	5692 5693	100 100	18 3%	1 1 2	1.75C 2.00C

*ALL JARS LIST AT S.65 PER JAR. BULK QUANTITIES LIST AS SHOWN. ORDER BY CATALOG NUMBER.

PRODU

RADIO HARDWARE

ICA FLEXIBLE RUBBER GROMMETS (5) Mtg. (4) Bulk Otv (1) Otv. Bulk Pkge. Hole Bulk Thick-Cat Cat. Slot Width List Size ness No. Jar No. 5120 5121 5633 5634 \$3.85C 100 15 743/81/4 56 56 4.30C 3.90C 3.00C 100 12 5635 5639 5122 100 100 5123 3.50C 5125 10 5637 5641 100 100 7.00C 5642 5687 100 100 3.75C 5127 12



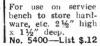
PILOT LIGHT CONTACT



For making center connection inside pilot light socket.

No. 2465 List \$5,00M

ICA UTILITY **GLASS JARS**





BRASS TINNED TERMINAL LUGS





		3033	3033	2020	2021	30 12	
Jar*	Qtv.*	Bulk	Qty.				
Cat.	Each	Cat.	Bulk				
No.	Jar	No.	Pkge.	Lenath	,	Hole Size	Bulk List
	· ·						
	_	5645	100	1/2		No. 8	\$.75C- 6.00M
	_	5654	100	7 ∕8		1/4	.80C- 6.00M
5135	125	5646	100	1/2		No. 6	.60C- 4.00M
	_	5656	100	11		No. 6	5.00M
5136	100	5647	100	7/8		No. 10	.65C- 5.00M
5137	75	5649	100	18		No. 8	1.00C- 8.00M
5141	7.5	5648	100	116		16	1.00C- 8.00M
				*		16	
		5655	100	12		No. 8	.80C- 6.50M
		5653	100	18		No. 6	.85C- 7.00M
5138	100	5650	100	3/4		No. 8	1.00C- 8.00M
5139	75	5651	100	11 9 16 3/4		No. 10	1.75C-11.00M
5140	50	5652	100	110		1/4	2.50C+16.00M
02.10	50	303E	100	11.6		74	2.300-10.00M

EVERLOCK TERMINAL LUGS



5483	5484	5482
5145 5146 5147	50 60 55	5480 5481 5482 5483

50

5484

5148

E E	3 144	0
	5481	
100	11	N



548	21		5480
100 100 100 100 100	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No. 6 1/4 No. 4 No. 6 No. 8	\$1.50C-12.00N 1.50C-12.00N 1.40C-11.00N 1.40C-11.00N
100	/8	110. 0	1.100 11.001

DISPLAY "SALESMAN" MERCHANDISER OF HARDWARE AND RADIO ESSENTIALS



With this ICA display assortment you can now sell hardware in a packaged form. This assortment includes — all sizes Round Head Machine Screws — Nickel plated nuts to match — Parker-Kalon self-tapping screws — Kant-Link lock washers — Shake-Proof washers — plain washers — flat fibre washers — flexible grommets — lugs — eyelets — rivets — escutcheon plate screws — midget fuse clips — spade bolts — spring clips — clamps — angles — rack screws — and washers, etc.

rack screws — and washers, etc.
EACH ITEM INDIVIDUALLY PACKED IN A GLASS
DISPLAY JAR. Each jar contains an ample quantity
of individual type and size hardware used by dealers,
servicemen and amateurs. A complete radio hardware
assortment, beautifully put up in these jars and
stacked in a handsome durable metal rack which
holds 36 jars.

deep,

EVERYMAN'S 1000-PIECE RADIO HARDWARE ASSORTMENT

An assortment of hardware commonly used by dealers, commonly used by dealers, servicement, amateurs, experimenters, etc. Contains 1000 pieces of assorted machine screws — wood screws — nuts — bolts — rivets — eyelets — lugs — lock washers — rubber grommets, etc.



ICA ALL-PURPOSE RADIO HARDWARE AND ESSENTIAL EQUIPMENT

Packed in a handy indestructible metal utility



This De Luxe assortment includes such items as knob set screws — escutcheon self-tapping screws — grommets — screws — nuts, etc. escutcheon screws

No. 5251.....List \$4.75



ICA ANGLE AND BRACKET ASSORTMENT

A complete assortment of 30 popular angles and brackets, nickel plated finish.

No. 5800List \$.75



ICA RUBBER GROMMET ASSORTMENT

Assortment contains popular sizes used in Radio and Electrical Work. ...List \$.75 No. 5810

Contains 28 Rubber Grommets List \$1.50

No. 5811 Contains 60 Rubber Grommets



ICA FIBRE WASHER ASSORTMENT

representative assortment of fibre washers th plain and shoulder, to fit all popular size screws and bolts.

No. 5805.....List \$.75

Contains 100 assorted washers



ICA MASTER SCREW AND NUT ASSORTMENT

Contains a substantial

quantity of all the popular sizes machine screws, wood screws, Parker-Kalon self-tapping screws and nuts to match.

...List \$5.50 No. 5252.

ORDER BY CATALOG NUMBER.

ICA INSULATED AND BRASS SPACERS AND BUSHINGS

Used for raising sub panels, chassis, condensers, etc. For manufacturers, experimenters and laboratory use.

Made of High Quality Brass

No. 5760 5761 5762 5763 5767 5764 5765 5766	Diameter 14" 14" 14" 14" 14" 36" 36" 36" 36"	Length 1/4" 3/8" 1/2" 3/4" 1/4" 1/2" 3/4"	per C \$3.50 4.00 4.25 5.00 5.50 4.25 5.00 5.50 5.75
3700	Made of Fenoli	ne Insulati	
5775	1/4"	1/4"	3.75
5776	1/4"	3/8"	4.50
5777	½″.	1/2"	5.00
5778	1/4"	3/4"	5.50
5782	3/ "	1"	7.00
5779	78	1/4"	5.00 6.00
5780	3/8″	3/ "	6.50
5781 5783	· 3/8″	74	5.75
		ngs—1/4''	Diameter
			4.25
5785 5786	for 6/32 screw	1/4" 3/8"	5.25
5787	**	14"	6.50
5788	44	3/4"	7.50
5794	"	1"	8.00
5790	for 8/32 screw	1/4"	4.25
5791	46	%"	5.25
5792	66	1/2"	6.50
5795	"	1"	8.00

Molded Bakelite Spacer Bushing

2365—Suitable for either spacer or bushing. With brass eyelet.... \$2.50C 2366—Same as above—without eyelet 2.00C

SPACER AND BUSHING ASSORTMENTS Brass and Insulated

Assortment of 25 spacers and bushings in ¼ & ¾. Diameters from ¼" to ¾" long. Ideal for raising sub panels, chassis, etc.

No.	List
5260—Insulated Assortment	1.25
5261—Brass Assortment	1.25
Threaded Brass Bushing Assortments	
5262-16 Assorted Brass bushings.	
Threaded for 6/32 from 1/4" to	
34" lengths	1.25
5263-16 Assorted Brass bushings.	
Threaded for 8/32 from 1/4" to	

MAST ANTENNAS FOR STANDARD RECEPTION

DE LUXE WINDOW ANTENNAS 8 Feet—12 Feet



Made of Admiralty Brass with Beautiful Nickel-Plated Finish

- For Homes. Apartments,
 Hotels, Office Buildings,
 and places where it is in convenient to install out door aerials or to improve reception on indoor instal lations.
 Chiefely and casely installed.
- Ouickly and easily installed. Adjustable Bracket at base, permits the antenna to be focused in any position for best reception.
- Furnished completely as-sembled with mounting flange, insulator and lead-in strip.

Individually boxed.

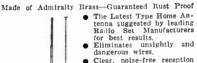
3 Section Telescopic Antenna Opens to 96" No. 4527B List \$4.45 No. 4529—3 Sec., Opens to 75" List \$3.25 10 to a Standard Carton—Weight 14 lbs.

4 Section Extra Long Window Antenna 12 Feet Long

Ideal for DX Reception and Rural Sections where extra length is needed for best results. No. 4513.....List \$6.75

HOME ANTENNAS

12 Feet-4 Sections



- Clear, noise-free reception with no power line interference.

 Very sturdy construction—
 made of Admiralty Brass
 with Beautiful NickelPlated Finish.

- Plated Finish.

 Guaranteed Rust-proof for the Life of Antenna.

 Universal Bracket allows permanent and convenient installation on soil pipe, window pipe, chimney, roof, gables, cornices, wall copings, etc.

 Individually boxed.

Vertical Mast with all accessories for Universal Mounting
Ground Wire, Brackets, Lightning Arrester, Screws,
Insulators etc. Insulators, etc.

4516......List \$6.95 10 to a Standard Carton—Weight 33 lbs. No. 4516

Television Antennas . . . Television Accessories

Since 1927. Insuline Corporation of America has been pioneering in the development of Television accessories. ICA now boasts of a complete line of television antennas of all types as well as the newest accessories and servicing tools.

Consult other pages for ICA's latest.

- Antennas—outdoor types
- Antennas—indoor types
- Servicing Tools
- Servicing Kits
- Accessories
 - -Filters
 - —Installation Kits
 - ---Mounting Brackets
 - -Guy Wire, etc.

Send for latest complete Television Catalog

ICA BAKELITE RADIO PANELS

Black, Polished Mirror Finish



	1/8" Thickne	ss i	1	3" Thicknes	
No.	Size	List	No.	Size	List
832	7 x 10	\$1.55	842	7 x 10	\$2.25
833	7 x 12	1.85	843	7×12	2,75
834	7 x 14	2.00	844	7 x 14	3.25
835	7 x 18	3.00	845	7 x 18	4.10
836	7 x 21	3.10	846	7 x 21	4.65
837	7 x 24	3.50	847	7 x 24	5.50
840	7 x 30	4.50	850	7 x 30	6.75
860	10 x 12	2.75	863	10 x 12	4.15
861	10 x 18	3.65	864	10 x 18	5.65

ICA FULL SIZE BAKELITE SHEETS

Black Glossy Finish

No.	Size	Thickness	App. Wt.	List
852 853	38" x 49" 38" x 49"	18", 32",	6 lbs. 8 lbs.	\$21.50 27.00
854	38" x 49"	1/8 "	12 lbs. 16 lbs.	44.00 55.00
857 858	38" x 49" 38" x 49"	1 0 1/4 "	20 lbs.	66.00

Prices on other sizes or thicknesses quoted on request

ICA ALUMINUM PANELS

silver finish and are supplied in the following sizes: Size No. 1194 1195

ICA Aluminum panels and sheets have a bright List No. \$1,35 | 1200 1,60 | 3157 1.75 | 3158 2,35 | 3159 2,85 | Size 7 x 24 10 x 12 10 x 18 List 7 x 10 7 x 12 7 x 14 7 x 18 \$3.50 2.75 3.15 1196 1198 1199 10 x 24 5.50 7 x 21

SEE OTHER PAGES FOR ICA'S COMPLETE LINE OF RELAY RACK PANELS AND CHASSIS BASES (STEEL OR ALUMINUM), RACK CABINETS, AMPLI-FIER CHASSIS, SPEAKER CABINETS, ETC. SPE-CIAL SIZE CABINETS AND CHASSIS MADE TO SPECIFICATIONS.

PLUGS - MICROPHONE CONNECTORS

Single Contact Female Microphone Connector



This microphone connector assures a completely shielded connection. All metal parts are chrome plated brass except spring. Used extensively for making connections from microphone to accept the control of the contro making connections from mi-crophone to amplifier. When used with our part No. 505 and 500, any combination of connection can be arranged. Equipped with coupling ring. No. 506 LIST PRICE 50c

Single Contact Male Microphone Connector



Similar to micro-phone connector No. 506 above ex-cept that it has a and no coupling

No. 505

LIST PRICE 40c

PHONE PLUG ADAPTER



For use with the connector 506 shown at the top. Fits any standard phone jacks. No wiring or soldering to make connection. Made of

necessary nickel plated brass.

No. 223

LIST PRICE 45c

DOUBLE PHONE PLUG



two way phone plug. Will accommodate 2 sets head-

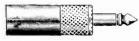
phone tips or lugs. Fits all standard jacks. Handle molded bakelite. Metal parts are nic plated brass. Available in red and black. nickel

No. 211

No. 224-Barrel only

LIST PRICE 50c LIST PRICE 20c

SHIELDED TWO-WAY PHONE PLUG



Identical to our part No. 211 phone plug except that barrel

made of nickel plated brass for shielding purposes.

No. 221-Plug

No. 222-Barrel only

LIST PRICE 85c LIST PRICE 50c

MALE CHASSIS CONNECTORS





No. 500. This mike connector is used on the chassis or in the mike. It is the open circuit type. Mounts in a 3% hole. Supplied with insulating washers, solderless lug and nut. Fits 5%-27 connections.

No. 501. Similar to above, except for shortening feature when disconnected. Ideal for use with multiple mixer amplifier. Supplied with insulating washers, lug and

No. 502. Is an open circuit pressure connector, similar to No. 500 except the spring contact protrudes to make pressure contact. Supplied with insulating washers, solderless lug and nuts.

No. 507. Similar to No. 500 except equipped with a linen base bakelite plate for mounting centers, 1-5/32".





No. 508. Similar to No. 500 equipped with mounting plate for mounting centers 1-5/32".

Similar to No. 502 equipped with mounting plate for mounting centers 1-5/32".

No.	Contact Action	Mounting	Fig.	List Price
500	Open	Locknut	Α	30c
501	Shorting	Locknut	·B	40c
502	Pressure	Locknut	В	40c
507	Open	Bakelite Plate	С	30c
508	Shorting	Bakelite Plate	D	40c
509	Pressure	Bakelite Plate	D	40c

SHIELDED PHONE PLUG



A newly designed shielded 2 conductor miniature phone plug that fits all standard jacks. One conductor is brought through the entire plug to the tip where the connection is soldered to a tinned insert. The other conductor is connected to a lug under the shell. The 1/4 inch shank is ground to very exacting tolerances, Supplied with an internal rubber cord grip. ternal rubber cord grip.

LIST PRICE 55c

SHIELDED CAP



Used with our No. 500, 505 and 507 for shielding purposes. Equipped with ball chain to prevent loss.

No. 231

No. 504

LIST PRICE 55c

SIGNAL CORP PLUGS



PL-55 PLUG

PL-55 plug is a standard 2 conductor phone plug used by the U. S. Army, Signal Corps and U. S. Navy. It fits the standard Signal Corps JK-34A and JK-24 jacks. Supplied with solderless lugs.

LIST PRICE\$1.35



PL-68 PLUG

PL-68 plug is a 3 conductor microphone plug. It is designed for use with the JK-33 Signal Corps and Navy type jacks. Supplied with soldeerless lugs.

LIST PRICE\$1.75



PL-47 PLUG

PL-47 is a 2 conductor Signal Corps phone plug that fits all standard jacks and Signal Corps jacks numbers JK-24 and JK-34A. Generally used in switchboard work with braided cords. For strain relief the cord is threaded into the plug. Black handle.

LIST PRICE\$2.00

PL-48 PLUG

Identical to the PL-47 except for the red

LIST PRICE\$2.00

Apparatus Co.

412 SOUTH GREEN ST.

CHICAGO 7. ILLINOIS

PLUGS · JACKS · CLIPS · SWITCHES · KNOBS

TELEGRAPH APPARATUS CO.

JK-24 JACK



JK-24 jack is a Signal Corps jack of distinctive design. Its construction assures an unvarying distance from the front of the sleeve to the jack springs. This jack is used generally in switch board work. The Signal Corps PL-55, PL-47 and PL-48 plugs are used in conjunction with this jack.

LIST PRICE\$1.75

3AG FUSE MOUNTINGS







Very sturdily constructed on 1/4" black bakelite. Bottom rivets are recessed to permit mounting on metal. Clips are made of spring tempered nickel plated brass. Have center holes for mounting.

No.	Type	LIST PRICE
700	Single	20c
701	Double	30c
702	Clips Only Pe	er C \$1.75

RCA TYPE PIN PLUG AND JACK



Used on RCA and most other receivers for a shielded phono connection, Can also be used as a shielded auto antenna connection.

No.	Des.	LIST PRICE
400	Pin Plug	9€
401	Shielded Jack	15c

PL-54 PLUG



PL-54 plug is designed to fit only the Signal Corps and Navy type JK-26 jack. Supplied with solderless lugs.

LIST PRICE\$1.35

SLIDE SNAP SWITCH



A very popular switch used in many radio circuits—tone — B.F.O. — pheno, etc. Ribbed black bakelite handle. Housing is cadmium plated steel. High quality insulating material. Mounting centers 11/8".

No.	Туре	LIST PRICE
601	SPST	26c
602	SPDT	33c
603	DPST	38c
604	DPDT	49c

FAHNESTOCK CLIPS







Millions of these spring binding posts clips have already been used. Crips wire with just enough pressure for good electrical contact. Made of spring tempered brass. **Bronze*

No	Eia	Length	Width			Price
	A	116	3/8	10		\$2.00
10	Α	3/4	1 ⁵	14		1.65
#15	В	1/2	372	16	.4	1.55
9	C	210	3/1	10	8	10.00
18	С	13/2	16	14	6	9.00

MINIATURE BAKELITE 7 PIN TUBE SOCKETS

SADDLE MOUNTING







Top Mount With Center Shield



Top Mount Base and Center Shield

No.	Insulation	Mounting	L ist Price
1100	Black Bakelite	Bottom	\$0.20
1105	Mica Filled Bakelite	Bottom	.25
1107	Black Bakelite	Тор	.20
1108	Mica Filled Bakelite	Тор	25
1150	Black Bakelite	Тор	.30
1151	Mica Filled Bakelite	Тор	.40



BLANK WALL PLATES

2 GANG WALL PLATE identical to above except mounted with four mounting screws. Fits larger outlet box.

No. 1202 List Price 60c

JK-26 JACK



JK-26 jack is a Signal Corps cable type jack. It is used on the end of a cord as a 2 conductor connection and is used only in connection with the PL-54 plug.

LIST PRICE\$1.25

BANTAM OPEN AND CLOSED CIRCUIT JACKS



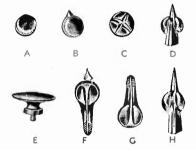


A

Small sized jacks that fit all standard phone plugs. The contact material is spring tempered nickel silver which will retain its resiliency permanently assuring good contact. Fits 36'' hole in panels up to 75'' thick. Supplied with nut and metal washer. Solder terminals tinned for easy soldering. Available in open and closed circuit.

No.	Fig.	Type	LIST PRICE
102	·A	Open	40c
103	В	Closed	45c

BAKELITE KNOBS



These knobs are all made of a very high grade bakelite and are available in various colors as listed below. All are for 1/4° shafts and are set screw type, except for

telegra	aph kr	nob.			
					List
No.	Fig.	Color	Length	Dia.	Price
1500	Α	Black	13"	11"	120
1501	A	Walnut	13"	11 "	120
1502	Ä	Red	13"	11 "	120
1503	A	lvory	13"	11 "	130
1504	В	Black	33"	11 "	120
1505	В	Walnut	13"	11 "	120
1506	В	Red	13"	ii "	120
1507	В	Ivory	32"	11"	130
1508	С	Black	3/4"	3/4"	120
1509	č	Walnut	3/4"	3/4"	120
1510	C	Red	3/4"	3/4"	130
1512	D	Black	11/4"		150
1513	.D	Walnut	11/4"	- 1	15c
1514	D	Red	11/4"		21c
1515	D	Ivory	11/4"		21 c
1516	DEF	Black 1	Telegra	ph Knob	40c
1517	F	Black	2"		22c
1518	F	Walnut	2"		22c
1519	G	Black	15/8"	3/4"	15c
1520	G	Walnut	15/8"	3/4"	15c
1521.	Н	Black	2"		19c
1522	Н	Walnut	2"		19c
1523	' H.	Red	2"		24c
1524	·H	Ivory	2"		24c

PLUGS · JACKS · CONNECTORS

TELEGRAPH APPARATUS CO.

INSULATED SOLDERLESS PHONE TIP PLUG



A standard insulated solderless phone tip plug which fits our parts 101, 106, 108 phone tip jacks. Metal parts are nickel plated brass. Overall length 2-3/16". The high lustre insulated handle is 1" long. Available in red, black, green and

No. 202....LIST PRICE 18c

SOLDERLESS PHONE TIP PLUG



A standard solderless phone tip plug. Iden-tical to No. 202 above, except for in-sulated handle.

No. 263

LIST PRICE 10c

INSULATED SOLDERLESS JR. PHONE TIP PLUG



A standard insulated solderless junior phone tip plug made to fit our parts #101 and 106 phone tip jacks. Metal parts are nickel plated brass. The high lustre insulated handle is I" long. Available in black, red, green and yellow. Overall length 1%".

No. 204.....LIST PRICE 18c

SOLDERLESS JR. PHONE TIP PLUG



A standard solderless junior phone tip plug identical to No. 204 above except for in-sulated handle.

No. 205

LIST PRICE 10c

Insulated Solderless SPRING BANANA PLUG



This insulated non-collapsible solderless spring banana plug is designed to give the greatest area of contact. Connection is made by a side set

Metal parts are nickel plated brass except the four leaf banana spring which is nickel plated phosphor bronze. The high lustre insulated handle is I'' long. Available in red black, green and yellow. Overall length

No. 208

LIST PRICE 20c

Giant Banana Plug & Jack



Designed to handle heavy high frequency currents. Made of nickel plated spring brass.

LIST PRICE No. 225 -Plug with threaded shank 33c | -Plug with 10-32 hole with screw 35c | No. 100

SPRING BANANA PLUG INSULATED



In this spring banana plug no metal parts are exposed around the insulated handle. Connection is made lated handle. Connection is made by soldering to special type tubular lug which is an integral part of metal body. Non-collapsible four leaf banana spring gives maximum area of contact. Metal parts are nickel plated brass except banana spring which is nickel plated phos-phor bronze. The high lustre insu-lated handle is I" long. Available in red, black, green and yellow.

No. 209.....LIST PRICE 18c

INSULATED SOLDERLESS SPRING BANANA PLUG

(INTERNAL SOLDERLESS FASTENER)



An insulated spring banana plug identical in appearance to our part No. 209 except that connection is made to an internal solderless fastener. The high lustre insulated handle is available in red, black, green and yellow.

No. 210.....LIST PRICE 20c

Insulated Phone Tip Jack



An insulated phone tip jack which makes very positive contact. Contact springs are made of phosphor bronze. Metal parts are nickel plated brass. The high lustre insulated head is \(\frac{h}{h}\) in diameter. Available in red, black, green and yel-

Fits 1/4" hole in panels up to 1/4" thick. Supplied with nut and insulatina washer.

No. 101

LIST PRICE 15c

PHONE TIP JACK



A phone tip jack identical to our part No. 101 above except that it has a non-insulated 5/16" hex head. Metal parts are nickel plated brass.

Fits 1/4" hole in panels up to 3/8" thick.

No. 106

LIST PRICE 10c

Open Circuit Phone Jack



Made to fit all stand-Made to fit all stand-phone plugs. Contact spring made of nick-el plated phosphor bronze and body made of nickel plated brass. Highest qual-ity insulating mate-rial used. Fits %" hole in panels up to 3/16" thick. Supplied with one metal wash-er.

SPRING BANANA PLUG



This spring banana plug is used ex-This spring banana plug is used extensively for plug-in coils, etc. Greater surface contact gives low RF resistance. Threaded shank is 6-32 thread, 3½" long. Overall length 1-3/16". All metal parts are nickel plated brass except the four leaf banana spring which is nickel plated phosphor bronze. Supplied with saldering lag. with soldering lug.

No. 206.....LIST PRICE 11c

SPRING BANANA PLUG



Identical to our part No. 206 above except that threaded shank is 34" long.

No. 207.....LIST PRICE 12c

SPRING BANANA PLUG



Identical to No. spring banana plug except that instead of cept that instead of threaded shank it has a female 6-32 thread. Sup-plied with soldering lug and 6-32 screw.

No. 212.....LIST PRICE 12c

BANANA JACK



A standard banana jack made of nickel plated brass. Overall length 5%". Fits 1/4" hole in panel. Supplied with solder lug and nut.

No. 105.....LIST PRICE 9c

INSULATED BANANA JACK



All metal parts are nickel All metal parts are nickel plated bross. The high lustre insulated head is available in red, black, green and yellow. Fits 1/4" hole in panels up to 3/8" thick. Supplied with solder lug, insulated washer and nut.

No. 107....LIST PRICE 15c

Insulated Combination



Banana Plug & Phone Tip Jack

An insulated combination ba-An insulated combination back-man plug and phone tip jack-made to fit our parts Nos. 206, 207, 202, 203, 208, 209, 210, 212, and 220. The phosphor 212, and 220. The phosphor bronze contact springs assure positive contact. Fits 1/4" hole in panels up to 5" thick. The high lustre insulated head is available in red, black, green and yellow.

No. 108

LIST PRICE 20c

STANDARD PHONE TIP



A standard phone tip made of nickel plated brass. Used extensively for con-nections on head

phone cords.

LIST PRICE 30c | No. 220..... LIST PRICE, PER 100 \$2.00

TEST PRODS · SHAFT COUPLINGS · CLIPS

TELEGRAPH APPARATUS CO.

AUTO ANTENNA CONNECTOR Instantly Detachable



Comes apart by slight twist. Makes an ideal single contact shielded connector. LIST PRICE 10c No. 402

AUTO FUSE CONNECTOR



Used in the battery lead of auto radio for protection. Fits a 3AG type fuse. LIST PRICE 14c

Insulated Alligator Clips



Sturdy clips made with thin jaws, fine meshing teeth and strong spring to assure hard bite. Handles 1" long.

No. 333-Red No. 334-Black LIST PRICE 20c LIST PRICE 20c

PANEL BEARING ASSEMBLY



The accurately reamed hole in bearing assures smooth, non-bind-

ing operation.
Equipped with
bowed spring washer which eliminates sliding forward and backward. Shaft is 1/4" in diameter. Fits 3/8" hole in panels up to 1/4" thick. Made of brass.

No. 1022-3" Shaft No. 1023-6" Shaft LIST PRICE 35c LIST PRICE 50c

DE LUXE FINGER GRIP PHONO-NEEDLE AND PHONE TIP TEST LEADS





Needle Point

Phone Tip Point

A deluxe test lead set with a ribbed finger grip will eliminate fatigue and slipping. Made of high quality insulating material 61/2" long, one each red and black. Supplied with a good grade of true kinkless wire 48" long. Available with phone tips or spade lugs on end as illustrated.

No.	Type	LIST PRICE PER SET
301	Spade lugs	\$1.20
302	Phone tips	1.20
303	Spade lugs	1.20
304	Phone tips	1.20

PANEL BEARING

Chaft



EXTENDER FIG. A

Accurately machined bearing made to fit 1/4" shafts. Fits 3/8" hole in panels up to 1/8" thick. Supplied to ½" thick. Sup with one mounting Body made of brass.

Overall

No. 1021

LIST PRICE 15c

1 ict

SHAFT EXTENDERS, COUPLINGS AND REDUCERS

	Microphon	e Base	Flanges	5 &		
	No. 1025—	-Fibre 12"	Long 1/4"	Dia.	LIST PRI	CE 50c
C		-Fibre 6"			LIST PRI	
		-Brass 12"			LIST PRI	
		-Brass 6"			LIST PRI	
		BRASS AN				
	No. 1009-	-Reduces a				CE 10c
В		F	EDUCER I	FIG C.		
	1012	912	, -	0 1/4	3/4	18c
-	1011	911	1/4 t		3/4	18c
	No.	No.	Dia.		Length	Price
	Brass	Insulated	Hole	Hole	Overall	List
		C	OUPLING	FIG. B		
A	1016		1/4	1/4	13/4	25c
		EXTRA	LENGTH	EXTENDE	R	
	1017	917	1/4	3/8	1 1/8	18c
	1015	915	1/4	1/4	1 ½ 1 ½ 1 ½ 1 ½	18c
	1014	914	3/8	1/4		18c
	No.	No.	Dia.	Dia.	Length	Price
- 46	Brass	insulated	поте	SHAIL	Overail	Lis

Extension Rods

Male Type

New mike stand items for which there has long been a demand. With the male type Base Flange the microphone can be attached directly to the desk, table, pulpit, etc. List Price



Female Type

No. 515-Male Flange No. 516-Female Flange \$0.75 .75

No. 517-6" Extension Rod No. 518-12" Extension Rod

\$0.75 1.00

DE LUXE FINGER GRIP PHONO-TIP TEST PROD

REMOVABLE PHONO-NEEDLE CHUCK



A ribbed finger grip phono-tip test prod identical to the prod used in the De Luxe test lead at the left.

No.	Color	Length	LIST PRICE
311	Red	41/5"	45c
312	Red	61/2"	50c
313	Black	41/2" 61/2"	45c
314	Black	61/2"	50c

DE LUXE FINGER GRIP SOLDERLESS TIP TEST PROD



Indentical to the above except prods are equipped with solderless phone tips:

No.	Color	Length	LIST PRICE
319	Red	41/2"	45c
320	Red	61/5"	50c
321	Black	41/5"	45c
322	Black	61/2"	50c

NEEDLE POINT TEST PRODS REMOVABLE PHONO-NEEDLE CHUCK



Test prods are made of non-breakable ex-truded plastic and available in red and black. Chuck can be removed from prod as well as phono-needle from chuck. All brass parts are nickel plated.

No. 315	Color Red	Length 4"	Price 35c
316	Red	6"	40c
317	Black	4"	35c
318	Black	6"	40c

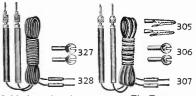
SOLDERLESS TIP TEST PRODS



Identical to above except that test prods are equipped with solderless phone tips.

No.	Color	Length	List Price
323	Red	4"	35c
324	Red	6"	40c
325	Black	4"	35c
326	Black	6"	40c

PHONO-NEEDLE AND PHONE TIP TEST LEADS



Solderless Tip Type Phono Tip Type

Prods are made of non-breakable extruded plastic, 4" long, one each red and black. Supplied with rubber covered kinkless wire 48" long. Insulated for high voltage. Available with non-insulated phone tips, spade lugs or alligator clips as illustrated.

	_	List
No.	Type	Price
305	Alligator Clips	\$1.10
306	Spade Lugs	1.00
307	Phone Tips	1.00
327	Spade Lugs	1.00
328	Phone Tips	1.00

SMITH Electronic Components HERMAN H. SMITH, INC.

INSULATED PHONE TIP JACK



Will accommodate all standard phone tip plugs, of the insulated and non-insulated types. Recommended for use with our Nos. 200 and 201 phone tip plugs. Insulated head % "dia. tip pings. Insulated head % "dia. available in Black, Red, Yellow and Green. Mounts in a ¼ "hole. Supplied complete with insulating shoulder washer and nut. Specify color.

No. 202 \$15.00 per C

200

INSULATED BANANA JACK



will accommodate all standard hanana type plugs.
Mounts in a ¼"hole in panels up to ¾" thick. Insulated head ¾" dia available in Black, Red, Yellow and Green. Supplied complete with insulated shoulder washer, soldering lug, and nut. Specify color.

No. 205 \$15.00 per C

INSTRUMENT BANANA JACK



Made of brass, nickel plated. Jack receptacle is counter-sunk and will accept all standard Banana type plugs for a snug and positive con-tact. Insulated head is ½" diameter and supplied com-

plete with insulating washer, lock washer, heavy duly soldering lug and nut. Available in Black, Red, Yellow and Green. Specify color.

No. 219.....\$19.00 per C

INSULATED COMBINATION JACK



This combination jack will accommodate all standard plugs, of the plone tip type or banana type construction. Mounts in a ¼" hole in panels up to ½" thick. Over-all length 1%". Supplied complete with insulating shoulder washer and nut. Insulated head available in Black, Red, Yellow and Green. Specify color.

No. 206.....\$20.00 per C

INSULATED SOLDERLESS BANANA PLUGS



Spring type construction, and will fit all standard banana jacks. Tapped hole is provided in rear of plug and small screw machine stud is provided so that wire can be wrapped around and tightened without the need of soldering. Insulated handle is ¾" long and available in Black, Red, Yellow and Green. Specify color.

No. 211.....\$20.00 per C



This plug constructed the same as No. 211 described above, but the plug portion is made of hexagon brass. Plug is also supplied with screw machine stud. Insulated handle 1" long and available in Black, Red, Yellow and Green colors. Specify color.

No. 212 \$25.00 per C

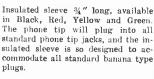
INSULATED SOLDERLESS PHONE TIP PLUGS

Insulated sleeve ¾" long, and available in Black, Red, Yellow and Green. Will fit all standard phone tip jacks and specially recommended for use with our No. 202 insulated jack. The wire fits through the sleeve of plug, and is wrapped around the screw portion, and then tightened with the knurled nut provided, making soldering unnecessary. Specify color ing unnecessary. Specify color.

Type
Plug with No. 105 Tip
Plug with No. 106 Tip

\$18.00 17.00

INSULATED PHONE TIP PLUG



No. 215..... \$15.00 per C

Phone tip only - less insulated sleeve. No. 125\$8.00 per C

INSULATED PHONO NEEDLE TIP PLUG



Insulated sleeve 34" long, available in Black, Red, Yellow and Green. The body of the plug will accommodate all standard banana type plugs. The sharp needle point phone tip will pierce through corrosion for positive contact.

No. 216... \$20.00 per C Needle tip only — less insulated sleeve.
No. 217 \$12.00 \$12.00 per C

INSULATED SHORT PHONE TIP



Will fit all standard phone tip jacks of the insulated or non-insulated types. Insulated sleeve 34" long, and available in Black, Red, Yellow and Green. Specify colors.

No. 203 \$15.00 per C

INSULATED BANANA PLUG Spring Type



Will fit all standard banana type jacks. A set screw is provided in the side of the plug to secure the wire to the plug without soldering. Insulated sleeves %" long available in Black, Red, Yellow and Green colors. Over-all length 1%". Specify color.

No. 204.....\$20.00 per C

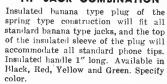
INSULATED BANANA PLUG Split Type



The banana plug is of the split type The banana plug is of the split type construction. Insulated handle %" long. A set screw is provided in the side of the plug, to secure the wire to the plug without soldering. Available in Black, Red, Yellow and Green colors. Specify colors.

No. 213 \$20.00 per C

BANANA PLUG AND PHONE TIP JACK COMBINATION



No. 214

.....\$45.00 per C

INSULATED BINDING POSTS



Knurled Insulated Head threaded eliminating the necessity for using a brass bushing. Each Binding Post complete with 6-32 x 3% screw and lockwasher. Available in Black and Red Colors. Specify

No. 207 208	Head Diameter	Per C \$15.00 15.00
209 210	Head Only 3/8 " 1/2 "	\$ 6.50 7.00

INSULATED SPADE LUG



Insulated sleeve %" diameter, %" long and available in Red and Black colors. The barrel of the insulated sleeve will accommodate all standard type banana plugs.

No.	Type	Per C
218	Insulated Lug	\$15.00
129	Lug only	2.00

ALLIGATOR CLIP



Clips are made so that the jaws match accurately, permitting them to grip all sizes wire accurately. The barrel of clip will accommodate all standard banana type plugs. Made of steel, cadmium plated. Over-all length 2".\$10.00 per C

INSULATED ALLIGATOR CLIP



Embodies our No. 300 Alligator Clip. Insulated handle ¾" long and will accommodate all standard banana type pluss. Insulated handle available in Black and Red colors. Specify color required.

No. 301 ... \$20.00 per C

ALLIGATOR CLIP PHONE TIP JACK



Insulated phone tip jack with No. 300 Alligator Clip. The jack portion will accommodate all standard phone tip plugs. Insulated handle 1" long available in Black and Red colors. Overall length 2 %". Specify color.

No. 304 \$45.00 per C

ALLIGATOR CLIP COMBINATION JACK



The insulated jack portion will accommodate all standard phone tip or banana type plugs. Insulated handle 1½" long available in Black and Red colors. Over-all length 3". Specify color.

No. 305 \$50.00 per C

SMITH Electronic Components SMITH, INC. HERMAN H.

H AND H TOGGLE SWITCHES

Rated 1 Amp. 250 Volts, 3 Amps. 125 Volts. Switches are nickel plated and supplied with mounting nut.





BAT HANDLE TOGGLE **SWITCHES**

These switches are the same as described above with bat shaped handle. Shaft length 35".

No.	Type	Each
510	SPST	\$0.60
511	SPDT	.75
512	DPST	1.15
513	D P D T	1.30



ROTARY TOGGLE **SWITCHES**

Made by H & II, rated at 1 Amp. 250 Volts, 3 Amps. 125 Volts. Switches are nickel plated and supplied with mounting nut.

		Threaded	Over-all	
No.	Type	Shank	Length	Each
570	SPST	3/8 **	1 1/2 "	\$0.80
571	SPDT	3/8 "	1 1/2 "	.90
572	DPST	3/8 "	1 1/2"	1.40
573	DPDT	3/8 " 3/8 "	1 1/2 "	1.70



SLIDE LEVER **SWITCHES**

Rated $1\frac{1}{2}$ " Amps. 110 Volts. Size $1\frac{1}{8}$ " x $\frac{1}{2}$ ". Mounting centers $1\frac{1}{8}$ ".

	2121	
518	DPDT	.50
517	DPST	.45
516	SPDT	.35
515	SPST	\$0.30
No.	lype	Each



HEAVY DUTY POWER **SWITCHES**

These Heavy Duty Power Switches are made by H & H and are specially recom-mended for use in amplifiers, mended for use in amplifiers, transmitters, motors and all heavy current circuits where heavy current is carried. Available in 3 types with neutral off in center position. Rated at 10 Amps. 125 Volts. Measures 2' long, 1" high, 1¼" wide, mounting sleeve diameter %".

No.	Type	Each
5 7 4	DPDT	\$6.00
575	TPDT	9.00
576	4 P D T	13.25

PUSH BUTTON MOMENTARY SWITCH



Two-circuit slow make and break Momentary Switch made by H & H. Solder lug, one circuit normally "ON", one circuitnormally "ON", one circuitnormally "OFF". %" slotted sleeve, rated at 75 Watts, 125 Volts.

....\$1.05 each Casein buttons in Black and Red colors can be obtained for the above switch\$.40 each

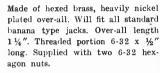
BANANA TYPE PLUG



This plug is hexed brass, nickel plated. The spring is made of phosphor bronze assuring positive and lasting contact. Plug is constructed with a 6-32 female thread inside and is supplied with a 6-32 screw and soldering

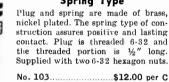
No. 100 \$12.00 per C

SPLIT TYPE BANANA PLUG



No. 104......\$12.00 per C

BANANA TYPE PLUG Spring Type



MIDGET PLUGS AND JACKS





PHONE TIP JACK



Will accommodate all standard phone tip plugs of insulated and non-insulated types. Made of brass, nickel plated. Mounts in a ¼" dia. hole in panels up to 38" thick, and is supplied with hexagon nut.

No. 107.....\$10.00 per C

METAL BINDING POST



Made of brass, heavily nickel plated over-all. Supplied complete with screw and washer.

No. 110.....\$25.00 per C

MOLDED BAKELITE **SWITCHES**



Made by H & H, rated at 3 Amps. 250 Volts, 6 Amps. 125 Volts. Bat Lever type with silver plated contacts. \(\frac{157}{32}\)'' slotted sleeve.

No.	Ty	pe	Shaft	Each
520	S P	ST	15"	\$1.05
521	S P	D T	33"	1.20
522	D P	ST	35"	1.40
523	D P	D T	15"	1.70

BANANA PLUG JACK



Recommended as the mate for the No. 100 Banana type plug, but will accom-modate all standard banana type plugs. Jack is made of brass, heavily nickel plated over-all. Mounts in a ¼" hole and will fit in panels up to ½" thick. Jack is furnished with ¼-32 nut and soldering lug.

No. 101

\$12.00 per C

BANANA PLUG JACK



Will accommodate all standard banana type Will accommodate all standard banana type plugs and specially recommended as the mate for Nos. 103 and 104 banana plugs. Made of brass, nickel plated, and mounts in ¼" hole in panels up to ¾" thick. Supplied with nut and soldering lug.

No. 109

..\$10.00 per C

MIDGET PHONE JACK



Signal Corps type J 670 Signal Corps type J 670
— Single open circuit
midget phone jack. It
mounts in %" hole in
panels up to ¼" thick.
Bushing is brass, nickel
plated. Springs made of
phosphor bronze, and the
springs are insulated springs are insulated from the frame by heavy

duty bakelite washers.

No. 122 \$35.00 per C

SOLDERLESS PHONE TIPS



These tips are constructed so that the wire fits through the body of the tip, and is wrapped around the screw portion, and tightened with the knurled nut provided, making soldering unnecessary.

No. Length Per C 1 5/8 " 1 1/8 " \$10.00 106 10.00

SOLDER TYPE PHONE TIPS

Made of brass, nickel plated. Overall length 1". Dia. of tip will fit all standard phone tip jacks.

No. 108\$20.00 per M

LARGE DIAMETER PHONE TIP

Material of Brass and Nickel plated finish. The barrel is drilled extra large to accommodate heavy wire. Diameter of hole ½" — length of barrel ½" and over-all length 1".

No. 123.....\$30.00 per M

THREADED PHONE TIPS



Available in either the Solderless Phone Tip type, or the Phono Needle Point type. The chuck is threaded 1/4-32.

Type No. Solderless Tip \$15.00 124 128 Needle Point 15.00

MINI-MAX CONNECTING STRIP



This fastening connecting strip is spaced so that it will snap into all 67 ½-Volt Mini-Max "B" batteries such as Eveready Nos. 455, 466 and Burgess Nos. XX30, XX45. \$25.00 per C

Electronic Components HERMAN H. SMITH, INC.

DUTY BAKELITE BARRIER TERMINAL STRIPS

Height 11" Willet 7/ " my talenge



This latest type of construction of bakelite strip is made of molded bakelite of very high tensile strength. The barriers between each terminal prevent any possibility of short circuits and leakage between terminals. The terminals and screws are brass, nickel plated. These strips are manufactured by the KULKA ELECTRIC MFG. CO. INC., Design Patent No. 136,762 and are exclusively distributed by us to the Radio Parts Distributors.

COLUMN A

All the Barrier Terminal Strips enumerated in Column A for the 1500, 1600 and 1700 series are made with screw type terminals exactly as shown in the illustration at top of page.

COLUMN B



All the Barrier Strips enumerated in Column B for the 1500, 1600 and 1700 series are supplied with the two-solder connection lug illustrated above.

COLUMN C



All the Barrier Strips enumerated in Column C for the 1500, 1600 and 1700 series are supplied with the one-solder connection lug illustrated above

COLUMN D



All the Barrier Strips enumerated in Column D for the 1500, 1600 and 1700 series are supplied with the bottom type connection lug illustrated above.

No. 1500 SERIES

reight \$3, Width %, Thickness 4. Terminals are %" on centers. Screws 5-40x 4" long, Binding Head.			
Col. A	Col. B	Col. C	Col. D
No. Terminals Each	No. Terminals Each	No. Terminals Each	No. Terminals Each
1501 1 \$0,14	1511 1 \$0.17	1521 1 \$0.17	1531 1 \$0.17
1502 2 22	1512 229	1522 229	1532 2
1503 3 30	1513 340	1523 340	1533 3
1504 4	1514 452	1524 452	1534 4
1505 546	1515 563	1525 563	1535 563
1506 6	1516 675	1526 675	1536 675
1507 7 62	1517 786	1527 786	1537 786
1508 8 ,70	1518 898	1528 898	1538 8 .98
1509 9 78	1519 9 1.09	1529 9 1.09	1539 9 1.09
1510 10 86	1520 10 1.21	1530 10 1.21	1540 10 1.21

No. 1600 SERIES

Height 1/2", Width 11/8",	Thickness 18". Term	inal sare	e 76" on centers.	Screws 6-3	2x1/4" long	, Binding	Head.
No. Terminals Each	No. Terminals	Each	No. Termina	als Each	No. Ter	minals	Each
1601 1\$0.18	1611 1	\$0.22	1621 1	\$0.22	1631	1	\$0.22
1602 228	1612 2	.37	1622 2	37	1632	2	.37
1603 3 38	1613 3	.52	1623 3	52	1633	3	.52
1604 449	1614 4	.67	1624 4	67	1634	4	.67
1605 5 ,59	1615 5	.82	1625 5	82	1635	5	.82
1606 669	1616 6	.97	1626 6	,97	1636	6	.97
1607 780	1617 7	1.12	1627 7	1.12	1637	7	1.12
1608 890	1618 8	1.27	1628 8	1.27	1638	8	1.27
1609 9 1 .00	1619 9	1.42	1629 9	1.42	1639	9	1.42
1610 10 1. 11	1620 10	1.57	1630 10	1.57	1640	10	1.57
1611P 11 1.21	1641 11	1.72	1644 11	1.72	1647	11	1.72
1612P 12 1.31	1642 12	1.87	1645 12	1.87	1648	12	1.87
1613P 13 1.42	1643 13	2.02	1646 13	2.02	1649	13	2.02

1700

Height %", Width 11", Thickness %". Terminals are 18" on centers. Screws 8-32x16" long, Binding Head.							
No. Terminals Each	No. Terminals	Each	No. Terminals	Each	No. Te	rminals	Each
1701 1 \$0.21	1711 1		1721 1	\$0.27	1731		
1702 233			1722 2		1732		
	1713 3		1723 3	.64	1733	3	
1704 459	1714 4		1724 4		1734		.82
1705 571	1715 5		1725 5	1.01	1735		1.01
1706 684			1726 6		1736		1.19
1707 797	1717 7		1727 7		1737	7	1.38
1708 8 1.09	1718 8			1.56			
1709 9 1.22	1719 9		1729 9		1739	9	1.75
1710 10 1.35	1720 10		1730 10			10	1.93
1711P 11 1.47	1751 11	2.12	1754 11		1757		
1712P 12 1.60			1755 12	2.30	1758	12	2.30
1713P 13 1.73	1753 13	2.49	1756 13	2.49	1759	13	2.49

SOLDER TYPE LUGS **Brass Hot Tinned**



1484



1485 1486



1487





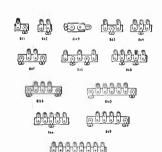






No.	Length	Hole	Per M
1484		No. 6	\$ 7.00
1485	5% "	No. 6	6.00
1486	5% " 5% " 78 "	No. 6 & No. 8	6.00
1487	5/2 "	No. 6	4.00
1488	5/8 " 3/4 " 7/8 "	No. 6	8.00
1489	7/8"	No. 8	8.00
1490	1"		10.00
1491	1" "	No. 8	12.00
1493		1/4 "	20.00
1492	1 1/4"	1/4 "	20.00
1494	1 1/8 " 5/8 "	No. 6 & No. 8	7.50
1495	5/2 "	No. 8	7.00

TIE DOWN TERMINAL STRIPS



No.	Per C	No.	Per C
849	\$2.75	865	\$5.50
	5.50		5.80
860	9.00		4.60
861	2.75		6.25
	3.25		6.40
	3.65		8.30
	4.20	5,0	

TERMINAL BOARDS Screw Type

Brass, hot tinned lugs mounted on 16" bakelite. Lugs are spaced 16" center to center.

No.	Terminals	Mounting Center	Per C
872	2	1 5 "	\$10.00
873	3	1 3/4 "	15.00
874	4	2 3 "	25.00
875	5	2 5/8 "	30.00
876	6	318 "	35.00
877	7	3 1/2 "	40.00

TERMINAL LUGS AND SCREWS



Recommended for heavy duty terminal strips. Lugs are tapped with screw inseried. No. 1478 lug, brass, cadmium plated and No. 1479 lug, brass, hot tinned.

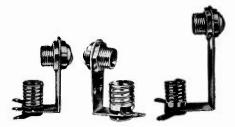
No. 1478.....\$3.50 per C 1478 1479 No. 1479...... 6.00 per C

SMITH

Electronic Components

HERMAN

PANEL INDICATOR 1/2 INCH JEWEL



These panel indicator assemblies are available in the candelabra, miniature screw, or bayonet base type sockets. Jewel holder is made of brass, nickel plated. Jewel mounts in a single T_{θ}^{r} dia. hole. Candelabra and bayonet base types can also be secured with a universal adjustable bracket for use where more accurate focus of the jewel to lamp filament is required. Facetted jewel available in Red, Green, Amber, Blue, Opal and Clear colors.

No.	Туре	Each
1900	Miniature Screw Socket	\$0.34
1901	Candelabra 110 Volt	.34
1902	Candelabra 110 Volt with Universal Bracket	.42
1903	Bayonet Base	.34
1904	Bayonet Base with Universal Bracket	.38

PANEL INDICATOR 34 INCH JEWEL



Available with candelabra 110 Volt, miniature bayonet base, and miniature screw type sockets. Jewel holder is made of brass, nickel plated. Jewel mounts in a single 18" dia hole. Facetted jewels available in Red, Green, Amber, Blue, Opal and Clear colors.

No.	Туре	Each
1905	Miniature Screw Socket Miniature Bayonet Base	\$0.73 .80
1906 1907	Candelabra Socket	.73

PANEL INDICATOR 3/8 INCH JEWEL



Available with miniature screw type socket, min. bayonet base, or candelabra type sockets. Jewel holder made of brass, nickel plated. Jewel mounts in a single 16" dia. hole. Facetted jewels available in Red, Green, Amber, Blue, Opal and Clear

No.	Type	Each
1908	Miniature Screw Socket	\$0.38
1909	Miniature Bayonet Base	.42

1 INCH OPEN TYPE PANEL INDICATOR



Jewel Removable from Front of Panel
This type of panel indicator has the added
feature of being able to remove the bulb
from the front of the panel. Jewel holder
made of brass, chromium plated finish.
Jewel mounts in a single 1" dia. hole. The
embossed rib in the center of the bracket
supplies additional strength, assuring perfect alignment. Available in three types:
Miniature screw socket, Miniature bayonet
socket and Candelabra type socket. Facetted
Opal, Clear.

Onal. Clear.

No.	Туре	Each
1917	Miniature Screw Socket	\$1.22
1918	Miniature Bayonet Base	1.25
1919	Candelabra	1.28



GLASS JEWELS

Jewels are available in Red, Green, Amber, Blue, Opal Jewel holders are brass, nickel plated, and are supplied with mounting nut.

	-F (1) (
3/8 Inch Jewel				Inch Jew	
MOLL	NTS IN &" H	IOLE	MOU	NTS IN 13" H	OLE
No.	Type	Each	No.	Type	
1940	Smooth	\$0.20	1913	Smooth	\$0.55
	Facetted		1914	Facetted	.55
	Inch Jew		_ 1	Inch Jewe	1
	NTS IN 76" H		MOU	NTS IN 1" H	
1911	Smooth	\$0.23	1915	Smooth	\$1.07
	Facetted	.23	1916	Facetted	1.07

1/2 INCH OPEN TYPE PANEL INDICATOR



Jewel Removable from Front of Panel Jewel holder made of brass, nickel plated.

Mounts in a single \(\frac{1}{6} \)" dia. hole. The embossed rib in the center of the bracket bossed rib in the center of the bracket gives additional strength and assures per-fect alignment. The bulb is easily re-movable from the front of the panel. Avail-able with Miniature screw type or Minia-ture bayonet base type sockets, with facetted jewels in the following colors: Red, Green, Amber, Blue, Opal, Clear.

No. 1920 1921	Type Miniature Screw Socket Miniature Bayonet Base Socket	Each \$0.50 .55
1721	annature payoner race seemer	

CLIP-ON TYPE PILOT LIGHT SOCKETS



rnis type of socket is available with the clip up or down, and can be used by clipping on to the variable con-denser or the chassis. This design socket is made with the miniature screw base, miniature bayonet base, or candelabra 110 Volt types. All brackets are cadmium plated. This type of socket is available with

No.	Туре	Per C
1922 1923 1924 1925 1926 1927	Miniature Screw Up Clip Miniature Screw Down Clip Miniature Bayonet Up Clip Miniature Bayonet Down Clip Candelabra Up Clip Candelabra Down Clip	\$13.00 13.00 15.00 15.00 17.00 17.00

BRACKET TYPE PILOT LIGHT SOCKETS



Available with an up or down type of bracket for the miniature screw type, miniature bayonet base, and for the candelabra 110 Volt type sockets. Brackets are made of steel, cadmium plated.

•1-	Type	Per C
No. 1928 1929 1930 1931 1932 1933	Miniature Screw Up Bracket Miniature Screw Down Bracket Miniature Bayonet Up Bracket Miniature Bayonet Down Bracket Candelabra Up Bracket Candelabra Down Bracket	\$13.00 13.00 15.00 15.00 17.00 17.00



UNMOUNTED TYPE SOCKETS

These unmounted sockets can be secured for the miniature screw shell, miniature bayonet base or for the candelabra 110 Volt types of sockets.

No.	Туре	Per C
1934	Miniature Screw Base	\$10.50
1935	Miniature Bayonet Base	11.50
1936	Candelabra 110 Volt	13.50

A 8-41

CLIP-IN SOCKET

This clip-in socket is of the bayonet base type construction, and is assembled with two solder lugs. The special clip in bracket is made of steel, cadmium plated, and is so designed that it clips into the dial directly.

	No. 193	38	\$14.00 per C	
_				

RUBBER GROMMETS

	A: C	utside Di	a.; B: Ins	ide Dia.; C ver-all; E:	: Panel Panel
- c		kness.			
No. A	В	C	D	, E	Per C
2185 %" 2171 %" 2172 %" 2176 ½" 2170 %" 2173 %" 2174 %" 2175 ¼" 2177 ¾"	1/3 // 1/4 // 1/	1/4"" 1/4"" 1/5"" 1/5"" 1/5"" 1/5"" 1/2"" 1/2""	16" 16" 16" 18" 18" 18" 18" 14" 14" 14"	16" 16" 16" 16" 16" 16" 16" 16" 16" 16"	\$2.00 2.50 3.00 3.00 3.50 3.25 3.50 3.25

SMITH Electronic Components HERMAN SMITH, INC

NEUTRALIZING AND ALIGNMENT TOOL



A complete, fully insulated neutralizing tool, a complete, they insulated neutralizing tool, screw driver and whench combination. The fibre wrench portion has a $\frac{1}{4}$ " hexed socket on one end and a $\frac{1}{4}$ " hexed socket on the other end. A $\frac{1}{4}$ " metal screw driver nib on the inside portion of the tool fits into the fibre tube itself

\$0.85 each No. 320 Display of 12 No. 320 Tools, \$10.20 each No. 700

ALIGNING TOOL

For Peanut I.F.'s • For RCA From Transformers For RCA Front End

Slender, yet sturdy, this tool is specially adapted for aligning peanut I.F.'s and the difficult-to-get-at front end of some receivers. Available in bulk or on attractive display card. No. 326. No. 778-

-Display of 24 No. 326 Tools, \$18.00 each

MIDGET ALIGNING TOOL WITH RECESSED NIB

This recessed nib aligning tool is another es-This recessed mb anging door is another esential for television servicing. Constructed from fibre with thin recessed nib for slug tuning. Only $2\frac{1}{2}$ long, it makes those hard-to-get-at slugs accessible while chassis is still in cabinet. Available in bulk or on attractive display card.

ALIGNMENT SCREW DRIVER

Fibre handle 32" dia. x 6" long, and fitted with a screw driver nib for aligning of coils, padding condensers, etc.

\$0.40 each No. 776—Display of 24 No. 321 Drivers, \$9.60 each

ALIGNMENT TOOL FOR PUSH-BUTTON RECEIVERS

This tool is especially designed for aligning push-button receivers and for adjusting iron core I.F. transformers and R.F. coils. There is a recessed screw driver nib on one end and a screw driver blade on the other. Both ends knurled for easy grip.

No. 325 \$0.7 No. 777—Display of 24 No. 325 Tools \$0.75 each \$18.00 each

FIBRE ALIGNMENT SCREW DRIVERS

Made of bone hard fibre and supplied in three sizes

No.	0.D.		Len	ath	Each
307	32"		7	ïi	\$0.40
308	76 "			"	.50
328	1/8"		- 4	"	.35
701—Display	of 24	No.	307	Drivers	. 9.60
702—Display					
782—Display	of 36	No.	328	Drivers	.12.60

TEST PROD



An exceptionally sturdy fibre prod with rear of prod designed to accommodate IN-34 crystal and condensers, necessary for use as an R.F. Probe. Heavy duty removable screw type tip for easy soldering.

No. 630. \$1.00 each No. 781—Display of 12 No. 630 Prods, \$12.00 each

SOLDERLESS TEST PROD HANDLES



Insulated handles, available in Black and Red colors. The wire is fed through the insulated handle and is wrapped around the screw portion of the plug and then tightened with the knurled nut provided, making soldering unnecessary. Specify color.

No. 302 303	Over-all Length 5 1/4 " 6 3/4 "	Each \$0.40 .50
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PHONO NEEDLE TEST PROD HANDLES



Insulated handles available in Black and Red colors. Wires can be assembled to the metal chuck by unscrewing the chuck from the prod handle. Specify color.

lo. 517 518	Over-all Length 5" 6 %"	Each \$0.40 .50
	5″ 6 ¾ ″	\$1

FIBRE TEST PROD HANDLES

Handles are made of fibre and can be obtained with either solderless tips or phono needle tips Constructed same as our numbers 302 and 317. Handles available in Black and Red colors. Specify color.

No. 323 324	Type Solderless Tip Needle Point	Length 5 1/8 " 5 1/8 "	Each \$0.30

HEXED FIBRE TUBES



Made of bone hard fibre, and constructed so that if the hex wears out, it can be cut off and the balance of the tube can be used.

	" HEX		5 /	'HEX
No.	Each	Size	No.	Each
309	\$0.30.	6"	313	\$0.30
310	35	8"	314	.35
311.	.45	10"	315	.45
312	.50	12"	316	.50

FAMNESTOCK SPRING BATTERY CLIPS



Clips are made of brass, nickel plated and are available in the single and double clip types.

No.	Type	Length	า	W	111	Take	Per C
533	Single	3/4 "	No.	14	В	& S Wire	\$1.65
534	Single	1"		10	В	& S Wire	2.00
535	Double	1 1/2 "	No.	10	13	& S Wire	9.00
536	Double	218"	No.	10	В	& S Wire	10.00

TEST LEADS WITH SOLDERLESS TIPS

Fibre handles colored Red and Black, 4" long x 3/8" diameter. Flexible rubber covered wire leads 50" long also colored Red and Black. Available with standard phone tips, spade lugs or alligator clips.

No.	Туре	Per Pr.
600	Phone Tips	\$1.10
601	Spade Lugs	1.10
602	Alligator Clips	1.25

PHONO NEEDLE TEST LEADS



Fibre handles colored Red and Black, 4" long x %" diameter. Tips are very sharp phonograph needles. Flexible rubber covered wires 50" long also colored Red and Black. Available with standard phone tips, spade lugs, or alligator clips.

No.	Type	Per Pr.
613	Phone Tips	\$1.10
614	Spade Lugs	1.10
615	Alligator Clips	1.25

ALL SOLDERLESS TEST LEADS

The insulated handles and the insulated plugs are both of the solsmarted pings are both of the softed derless type construction. Insulated handles, Red and Black, are our No. 302, and the plugs are our No. 200. Flexible rubber covered wire leads 50" long.

No. 603 \$1.65 per pair



HEAVY DUTY TEST LEADS

Heavy duty fibre handles 1/2" O.D. x 5 %" dles ½" Ö.D. x 5 ¾" dber guard between handle and metal tip to prevent a n y possibility of shocks. Flexible wire leads 50" long, colored Red and Black. Test leads are available with productions of the color of th

standard phone tip, spade lugs or alligator

No.	Type	Per Pr.
620	Phone Tips	\$2.25
621	Spade Lugs	2.25
622	Alligator Clips	2.50



ALLIGATOR CLIP TEST LEADS

Made of very flexible Red and Black wire with alligator clips at each end.

No.	Wire Length	Per Pr.
604	12"	\$0.75
605	24"	.85
606	36"	.95
607	48"	1.05

SMITH Electronic Components HERMAN SMITH, INC. Η.

BAKELITE FLAT PULL CAP



Approved and listed with U. L. This handy unit consists of two halves of bakelite held together halves of bakelite held together by a screw and nut. The prongs are of heavy brass and have screw terminals for conecting wire leads. Attractively de-signed for visible use and with an "easy-grip" shape to facil-itate insertion and removal from any receptacle. Colors: Brown and Ivory.

Color \$17.00 21.00 Brown Ivory



BAKELITE PONY CAP

Bakelite Pony Cap with Brass

No. Per C Color 858 \$13.00 Brown 17.00 859 Ivory

ATTACHMENT PLUG CAP



A snug-fitting, sturdy, bakelite base designed for use with base designed for use with standard attachment plug caps. Itas slot finding features on its face and heavy spring contacts for positive and lasting electrical contact. 660 Watts — 250 Volts.

No. 857.....\$17.00 per C

RUBBER ATTACHMENT - PLUG



Rubber handle attachment plug: Cord Hole %" (.375). Rated at 15 Amps. 125 Volts. Blades are made of Brass.

No. 850.....\$15.00 per C

BAKELITE HANDLE PLUG Foreign Type



Moulded bakelite handle foreign type plug. Blades are made of brass, and of the Continental Type spacing.

No. 851\$25.00 per C

AMERICAN-FOREIGN PLUG ADAPTER



Streamlined bakelite adapter, which adapts from American to foreign type plugs. The plugs will fit snugly into the adapter. The foreign type plugs are made of brass, and are of Continental Type spacing.

No. 852.....\$30.00 per C



AMERICAN-FOREIGN PLUG ADAPTER

British Type
Streamlined bakelite plug adapter, which adapts from American to foreign type plugs. The plugs will fit snugly into the adapter. Prongs are made of brass and are of the BRITISH TYPE spacing.

MICROPHONE CONNECTOR Single Contact Male



A completely shielded single contact connector. Made of brass and heavily chrome plated. Mate for No. 116 female connector.

No. 115 \$0.40 each

MICROPHONE CONNECTOR Single Contact Female



Mate for our No. 117 chassis connector. This connector is used extensively for making connections from microphone to amplifier. Comes equipped with coupling ring. All metal parts are made of brass, heavily chrome plated, except the spring.

No. 116.....\$0.50 each

CHASSIS CONNECTOR Single Contact Male



This type connector is recommendand stype connector is recommend-ed for use on the chassis or in the microphone. Made of brass, heavily nickel plated. Threaded %".27, and mounts in a %" hole. Sup-plied complete with washers, sol-dering lug and nut.

No. 117 \$0.30 each

CLOSED CIRCUIT CHASSIS CONNECTOR



Same as No. 117 Connector except that circuit closes when fe-male microphone connector (our No. 116) is removed. Supplied with washers, soldering lug and

\$0.40 each

FUSE MOUNTING BASES



Black bakelite, panel mount type. Will accommodate the 3 A G Auto type cartridge fuse.

531

Туре Single Double

\$0.20

FUSE CLIPS



Clips are made of spring brass, nickel plated. Will accommodate the 3 A G Auto type cartridge fuse. Clips 1/4" wide x 3/8" high.

No. 532 \$1.75 per C

CAP AND CHAIN Made of brass, heavily nickel plated. The cap seals open end

units against dust, eliminating noisy connections. Used with any threaded one or two-conductor chassis unit.

PHONO ADAPTER ATTACHMENT PLUG

Phonograph pick-up and auto radio connection plug.

No. 1201\$8.00 per C



PHONO JACK

Mate for the No. 1201 plug. Jack mounted on bakelite and metal back supplied for use with phonograph attachment.

No. 1203, \$12.00 per C



MOTOROLA TYPE PLUG

Attachment plug for all Motorola auto-radio receivers and many other types of auto radios

No. 1200\$10.00 per C



MOTOROLA SHIELDED JACK

Shielded Jack for Automobile which takes standard Chassis Motorola Plug.

No. 1207... \$18.00 per C

LEAD-IN ADAPTER



Lead-in adapter converts Motorola plug to Delco type plug.

No. 1204

.....\$11.00 per C



RUBBER FEET BUMPER

Rubber Bumper — 5/8" dia. x 32" thick. Recessed to accommodate a self-tapping screw, machine screw, wood screw or a tack.

No. 2184 \$4.00 per C

Insert Rubber Bumper — O.D. of shoulder $\frac{1}{2}$ " x $\frac{3}{3}$ " thick. Insert $\frac{5}{16}$ " long tapered from $\frac{3}{16}$ " to $\frac{3}{4}$ ".

No. 2183 \$3.00 per C



FELT FEET

Available in two types, either with a 6-32 x %" machine screw or with an "Anchor Fast" nail, which will stay in place, and will not back up, pull out, or "pop."

No. 2181 2182

Туре With Machine Screw With Stronghold Nail Per C \$6.50 7.00



PHONO TIP JACK Brass, nickel jacks with plated positive

contact springs mount-ed on 16" bakelite. Jacks are 16" center to center. Jacks will accommodate standard phone tips of either sol-derless or solder types.

No. 856 \$30.00 per C | No. 118 \$0.50 each | No. 878 \$20.00 per C

Electronic Components

HERMAN H. SMITH, INC.

STEEL MACHINE SCREWS Round Head, Cadmium Plated

Available in bulk quantities, or can be obtained packed 1,000 or a

gross to	the box.			
No.	Per M	Size	No.	Gross
1000	\$3.40	6-32 x 1/4"	1018	\$0.61
1001	3.60	6-32 x 3/8"	1019	.61
1002	3.90	6-32 x ½"	1020	.65
1003	4.20	6-32 x 5/8"	1021	.65
1004	4.55	6-32 x 3/4"	1022	.72
1005	5.20	6-32 x 1"	1023	.85
1006	4.20	8-32 x 1/4"	1024	.65
1007	4.55	8-32 x 3/8"	1025	.72
1008	5.20	8-32 x ½"	1026	.85
1009	5.50	8-32 x 5%"	1027	.98
1010	5.50	8-32 x 3/4"	1028	1.10
1011	6.50	8-32 x 1"	1029	1.25
1012	5.50	10.32 x 1/4"	1030	1.10
1013	6.00	10.32 x 3/8"	1031	1.17
1014	6.50	10.32 x ½"	1032	1.25
1015	7.15	10-32 x 5/8"	1033	1.40
1016	7.65	10-32 x ¾"	1034	1.45
1017	7.80	10-32 x 1"	1035	1.55



RACK SCREWS Oval Head, Steel, Nickel Plated

Specially recommended for mounting panels in racks and cabinets.

Available	in gross packag	res or packed 1000 to	the box.	
No.	Per M	Size	No.	Gross
1102	\$6.50	6-32 x 1/4"	1090	\$0.98
1103	6.85	6-32 x ½"	1091	1.05
1104	7.15	6-32 x 3/4"	1092	1.17
1105	7.80	6-32 x 1"	1093	1.30
1106	6.70	8-32 x 1/4"	1094	1.10
1107	7.80	8-32 x ½"	1095	1.25
1108	9.10	8-32 x 3/4"	1096	1.45
1109	9.20	8-32 x 1"	1097	1.55
1110	8.45	10.32 x 1/4"	1098	1.45
1111	9.20	10⋅32 x ½"	1099	1.55
1112	10.40	10-32 x 3/4"	1100	1.60
1113	12.35	10-39 v 1"	1101	1.80



COUNTERSUNK WASHERS Brass, Nickel Plated

Recommended for use with Rack Screws designated

	40010.			
No.	Per M	Size	No.	Gross
1115	\$6.80	6	1118	\$1.05
1116	7.20	8	1119	1.10
1117	7.20	10	1120	1.10

	FLAT	AND	SHAKEPROOF	WASHERS	
No.	Per M		Type	No.	Gross
1150	\$1.65	No. 6	Brass N.P.	1146	\$0.30
1151	2.00	No. 8	Brass N.P.	1147	.40
1152	2.00	No. 10	Brass N.P.	1148	.40
1127	3.50	No. 4	Shakeproof Int. Tee	th 1121	.55
1128	3.75		Shakeproof Int. Tee		.60
1129	3.75	No. 8	Shakeproof Int. Tee	th 1123	.60
1130	3.75	No. 10	Shakeproof Int. Tee	th 1124	.60
1132	4.00	1/4 "	Shakeproof Int. Tee	th 1126	.60
1131	7.50	3/8"	Shakeproof Int. Tee	th 1125	1.10
1139	3.50	No. 4	Shakeproof Ext. Tee	th 1133	.55
1140	3.75		Shakeproof Ext. Ted		.60
1141	3.75	No. 8	Shakeproof Ext. Tee	th 1135	.60
1142	3.75	No. 10	Shakeproof Ext. Tee	th 1136	.60
1144	4.00	1/4 "	Shakeproof Ext. Tee	th 1138	.65
1143	7.50	3/8"	Shakeproof Etx. Tee	th 1137	1.10

FANCY HEAD BRONZE FINISH SCREWS

No.	Size	Per M
1160	6-32 x 34"	\$10.70
1161	6.32 x 1"	11.40
1162	6-32 x 1 1/4"	12.50
1163	6-32 x 1 ½"	14.00
1164	8-32 x 34"	13.50
1165	8-32 x 1"	14.30
1166	8.32 x 1 1/4"	16.25
1167	8-32 x 1 ½"	21.50



SPECIAL NUTS





Machined of Brass Nickel Plated, Correct sizes for volume controls and

toggle sw	itches.		
No.	Type	Dimensions	Per M
1195	Volume Control	3/8 - 32 x 1/2 x 3/2	\$20.00
1196	Toggle Switch	15-32 x ya x 73	25.00
1197	Toggle Ring Nut.	15-32 x 5% x 3	30.00

BRASS MACHINE SCREWS Round Head, Nickel Plated

Available in bulk quantities, or can be obtained packed 1,000 or a gross to the box,

B. ODD TO	one boat			
No.	Per M	Size	No.	Gross
1044	\$6.10	4-36 x 1/4"	1036	\$0.90
1045	6.25	4.36 x 3/8"	1037	.95
1046	6.40	4-36 x 1/2"	1038	.98
1047	6.10	4-40 x 1/4"	1039	.90
1048	6.25	4-40 x ¼" 4-40 x %"	1040	.95
1049	6.40	4-40 x 1/2"	1041	.98
1050	6.40	6-32 x 1/4"	1070	.98
1051	6.80	6-32 x 3/8"	1071	1.05
1052	7.10	6-32 x ½"	1072	1.10
1053	7.35	6-32 x 5/8"	1073	1.17
1054	7.80	6-32 x 5/8" 6-32 x 3/4" 6-32 x 1"	1074	1.25
1055	12.75	6-32 x 1"	1075	1.85
1056	9.45	8-32 x 1/4"	1076	1.40
1057	9.90	8-32 x 3/8"	1077	1.45
1058	10.25	8-32 x 1/2"	1078	1.55
1059	11.65	8-32 x 5%"	1079	1.70
1060	12.75	8-32 x ¾"	1080	2.30
1061	16.95	8-32 x 56" 8-32 x 34" 8-32 x 1"	1081	2.50
1062	9.75	10-32 x 1/4"	1082	1.45
1063	12.00	10-32 x 3/8"	1083	1.75
1064	13.00.	10-32 x 1/2"	1084	1.95
1065	13.60	10.32 x 56"	1085	2.00
1066	14.60	10-32 x ¾"	1086	2.15
1067	16.95	10-32 x ¾" 10-32 x 1"	1087	2.45

HEXAGON NUTS

Brass, Nickel Plated

No. Per M Size No 1188 \$7.80 4-36 x ½" 118	
1188 \$7.80 \$4.86 \$\frac{1}{4}\textit{"}\$ \$11 1168 7.80 \$4.40 \$\frac{1}{4}\textit{"}\$ \$11 1189 7.80 \$6.32 \$\frac{1}{4}\textit{"}\$ \$12 1190 7.80 \$6.32 \$\frac{1}{4}\textit{"}\$ \$12 1191 9.75 \$8.32 \$\frac{1}{4}\textit{"}\$ \$12 1192 9.75 \$8.32 \$\frac{1}{4}\textit{"}\$ \$12 1193 9.75 \$10.32 \$\frac{1}{4}\textit{"}\$ \$12	2 \$1.15 9 1.15 3 1.15 4 1.15 5 1.45 6 1.45

Steel, Cadmium Plated

1179	\$5.15	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1176	\$0.85
1180	6.25		1177	.98
1181	6.25		1178	.98

EYELET TYPE SOLDER LUGS



1480



1481



1482



1483

Made of brass. Nos. 1480, 1481 and 1482 are hot tinned and No. 1483 cadmium plated. Specially recommended for mounting on

oor militar berring.			
No. 1480 1481 1482 1483	Length 5/8" 1/4" 15 "	Hole [§] 4 slot No. 8 No. 8	Per M \$ 4.50 10.00 7.50 7.50

BRASS AND STEEL ANGLES



No. Material Size Per C 1474 Brass N.P. ½" x ½" \$2.50 1475 Brass N.P. %" x %" 5.00 1476 Steel H.T. 34" x 34" 2.00 1477 Steel H.T. 5%" x 1 1/8" 2.00

TAPPED ANGLE BRACKET



Made of steel, cadmium plated. Size $\frac{1}{2}$ " x $\frac{1}{2}$ ", with one 8-32 tapped hole and one plain .165 hole.

No. 1473 \$4.50 per C



CABLE CLAMPS

1470—Steel, Cadmium plated, No. 8 hole, l. ¾", w. ¾". Fits ¼" cable \$1.25

1471—Steel, Cadmium plated. No. 8 hole, l. 5/8", w. 3/8". Fits 1/8 1/4 "cable.. 1.25

1472—Steel, Cadmium plated. No. 8 hole, l. 1", w. %". Fits over 1/2" cable.. 1.50

SMITH

Electronic Components

HERMAN H. SMITH, INC.

BRASS BUSHINGS

These brass bushings are ideal for use in raising sub panels, chassis, condensers, transformers, etc. Hole in bushing to accommodate a No. 6 or No. 8 screw.

		1/4" U.D.		
No.	Per C	Ĺength	No.	Per C
2100	\$3.50	1/4 "	2105	\$3.50
2101	4.00	3/8"	2106	4.00
2102	4.25	1/2 "	2107	4.25
2103	5.00	3/4 "	2108	5.00
2104	5.50	î"	2109	5.50
2101	•.••	3/8" O.D.		
2110	\$4.25	1/4"	2115	\$4.25
2111	4.75	3/8 "	2116	4.75
2112	5.00	1/6"	2117	5.00
2113	5.50	1/2" 3/4"	2118	5.50
2114	6.25	1"	2119	6.25
		-		

THREADED BRASS BUSHINGS

Brass bushings ¼" O.D. Threaded 6-32 and 8-32. eaded 6-32 Threaded 8-32 Threaded 6-32 No. Per C Per C Length No. \$4.25 5.25 6.50 7.50 1/4 " 3/8 " 1/2 " 3/4 " 1" \$4.25 5.25 2125 2120 2121 2126 6.50 2128 2124 8.50 2129 8.50

ORNITESTICENTERS."	KNURLED BATTERY NUT Brass, Nickel Plated	S
No. 1198 1199	Dimensions $6-32 \times \frac{1}{3} \frac{1}{2} \times \frac{13}{4} \times \frac{13}{$	Per C \$2.50 2.50



MINI-SHIELDS

The Perfect Shield For Mini-Tubes

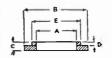
These new Mini-Shields are formed to fit snugly and yet expand to a constant snug fit on larger tubes to automatically compensate for the considerable variation in physical dimensions of miniature tubes as commercially examined. produced.

produced. Specially shaped serrations spaced to engage the lower mini-shield ribs catch and hold the shield firmly which actually tightens against vibrations or other forces tending to jiggle the tube loose.

These shields are made so that three rows of dimples pressing against the tube provide a gentle but firm snug fit. The three prong spring base clip grips the shield positively, cradling the tube within the shield and retaining it firmly in the socket secure against vibration. These Mini-Shields are available in two sizes to accommodate tubes 1½" long and 2" long.

No.	Туре	Over-all Length	Per C
550 551 553 554	For 2" Tube For 1½" Tube 3-Prong Base Clip Single Clips	1 ¾ ″ 1 ¼ ″	\$12.00 10.00 5.00 3.00

FIBRE SHOULDER WASHERS





- A. Inside Diameter
- B. Outside Diameter
- C. Thickness Over-all D. Height of Shoulder
- E. Diameter of Shoulder

No.	Α	В	С	D	E	Per M
2150	.140	.375	.093	.031	.237	\$10.50
2151	.110	.250	.062	.031	.187	8.50
2152	.136	.250	.093	.031	.187	9.00
2153	.136	.312	.093	.031	.187	10.00
2154	.250	.500	.068	.028	.312	11.00
2155	.172	.375	.093	.031	.246	9.75
2156	.196	.375	.093	.031	.308	9.75
2157	.375	.750	.093	.031	.500	13.00
2158	.385	.625	.093	.031	.500	12.50

FLAT FIBRE WASHERS

1.D.	0.D.	Thickness	Per M
.136	.250	16	\$8.25
.110	.250	16	8.25
.140	.375	110	7.50
.172	.375	16	7.50
.196	.375	16	7.50
.250	.500	16	8.00
.250	.500	3 2	8.25
.312	.500	16	8.00
.385	.625		9.75
.375	.750	16	12.00
	.136 .110 .140 .172 .196 .250 .250 .312	.136 .250 .110 .250 .140 .375 .172 .375 .196 .375 .250 .500 .250 .500 .312 .500 .385 .625	$\begin{array}{cccccccccccccccccccccccccccccccccccc$



MINI-SPRING FOR MINI-TUBES For Table Radios • Electronic Equipment Radio Receivers

The Mini-Tube guard gives support to the Mini-Tube in two ways. It maintains a direct axial pressure downwards plus a sideways support that keeps the tube upright and perpendicular to the chassis. The spring action is constant and resilient permanently. If your radio equipment has an inclined chassis . . or the tubes are mounted upside down or horizontally . . or if it is subject to any vibration . . . or if your demand is constantly superior trouble-free reception, Mini-Tube guards are the only way to insure that tubes stay in place forever.

No.	Туре	Per C
560	Short	\$12.00
561	Medium	12.00
562	Long	12.00
563	9-Prong	12.00



GRID CAP SHIELD

Shield is slotted on the side, for passage of the grid lead wire. The shield fits snugly over the grid cap of the tube, completely shielding same. Sh mium plated finish. same. Shield is cad-

No. 537.....\$10.00 per C



BRASS AND INSULATED COUPLINGS

For use on electronic equipment wherever a shaft extension is required. O.D. 78" x 34" long.

No.	Material	Type '¼" to '¼" '¼" to '¼" '%" to '¼"	Each
120	Brass		\$0.20
140	Insulated		.20
131	Brass		.20



STEEL SPADE BOLTS

Steel, cadmium plated finish, threaded 6-32, thread length 18", length over-

No. 1500 \$8.45 per M

BRASS AND INSULATED **EXTENDERS**

For use on electronic equipment wherever a shaft extension is required. Overall length 1 % ", shaft length 1 % ".
Aaterial Type Each
insulated 14" to 14" \$0.30
irass 14" to 14" ...30
irass 3%" to 14" ...30 No Material 130 150 Insulated Brass 132

THREADED BRASS RODS

Rods ordinarily supplied in 2-foot lengths; if one-foot length is required, please specify.

a named a company of the company of

No.	Size	Per Foot
1400	6-32	\$0.30
1401	8-32	.30
1402	10-32	.40
1403	1/4 "-20	.45



BEARING FOR PANEL ASSEMBLY

Made of brass, and fits in %" diameter hole in panels up to ½" thick. Bearing is made to accommodate ½" shafts.

No. 119.........\$0.20 each

PANEL BEARING ASSEMBLY



This panel bearing is accurately machined and is specially recommended for use as dial drives, or for mounting volume controls, switches, etc. Over-all length 1%". Supplied with nut. Drive shaft ½" 0.D.

No. 126 \$25.00 per C

BRASS AND INSULATED RODS

These rods are available in both brass and insulated material.

No.	Type	Length	Dia.	Each
1404	Brass	6"	1/4 "	\$0.20
1405	Brass	12"	1/4 "	.40
1406	Insulated	6"	1/4 "	.20
1407	Insulated	12"	1/4 "	.40

we are also in a position to supply brass and insulated rods of various diameters and will gladly quote upon receipt of inquiry.

SMITH Electronic Components HERMAN H. SMITH, INC

TELEVISION ANTENNA ACCESSORIES

CLAMP STAND OFF FOR ANTENNA MAST



A quick method for securing the antenna line down the mast. Simply slip clamp over the mast and tighten. It is not necessary to hold the nut to tighten. For antennas already installed, open the clamp and slip it around the mast. Thirty seconds and

the operation is complete! Available in two sizes and supplied completely assembled with $3 \frac{1}{2}$ " screw eyes with molded polyethylene inserts as shown above for twin lead, coaxial cables or with universal insert which accommodates either twin lead or coaxial cables.

Enn 7/211 and 111 March

	ror 78 and 1" Masts	
No. 1255 1261 1266	Type With Twin Lead Insert With Coaxial Insert With Universal Insert	Per C \$13.00 15.00 13.00
	For 11/8" and 11/4" Masts	
1256 1262 J.267	With Twin Lead Insert With Coaxial Insert With Universal Insert	13.00 15.00 13.00

LAG SCREW EXPANSION SHIELD



This expansion shield is extensively used in

STUD ANCHORS



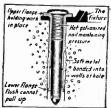
Stud Anchor consists of Cone-Headed Bolt,
Lead Alloy Sleeve-Metal Cone and Square
Nut completely assembled as at left.
The bolt has two fins on its tapered section to lock into lead sleeve after the
anchor has been set. This prevents the
hole and is 2" long over-all.

bott from turning when the square nut is tightened the size of the hole and is 2" long over-all.

Instructions for Installation: Drill hole proper diameter and depth—place Star Stud in anchor into hole, head of the bolt first—remove the square nut—place setting tool or piece of pipe over bolt and harmon anchor solidly.

No. 1232

DRIVE IN EXPANSION SHIELD



This is an expansion shield which uses nails as an expansion on locking pin.
Drill ¼" hole in the masonry and pass shield through mounting hole of object being attached so that top flange remains above fixtures. The nail, under the ham-mer blow, forces the lead into all the irregularities of the masonry hole, then passes through and locks anchor flange of bottom under the lead. The length of the shield is 1 ½".

No. 1233\$15.00 per C

GUY WIRE

An exceptionally high grade of steel galvanized guy wire for anchoring antenna masts. Available in two sizes, STANDARD—6 strands of No. 20; EXTRA HEAVY—6 strands of No. 18.
6 STRANDS No. 20

PPIKAN	IDS No. 20		6 STRAN	DS No. 18
No.	Each	Length	No.	Each
1250	\$0.80	50-foot Coil	1271	\$1.25
1251	1.50	100-foot Coil	1272	2.50
1252	7.00	500-foot Spool	1273	12.30
1253	13.20	1000-foot Spool	1274	24 50

This Guy Wire is also available in both sizes in 50-Foot Connected Coils, two dozen coils to the carton.

6 STRANDS No. 20 6 STRANDS No. 18 No. 1278 \$16.50 Each Carton No. 1279 \$22.00 Each Carton Each Carton: 24 Coils — 1200 Feet

SCREW EYE STAND OFF INSULATORS With Molded Polyethylene Inserts



This screw eye has a special low-loss polyethylene insert and is specially designed for use in 300-ohm line television installations.

No. 1210 1240	Twin Lead Insert Size 3 ½" 7 ½"	Per C \$6.95 9.00
1260 1270	Coaxial Cable Insert 3 ½" 7 ½"	7.80 9.7 5
	Universal Insert	
1265 1280	3 ½ ″ 7 ½ ″	6.95 9 .00



EYE BOLT ASSEMBLY

This is the only Eye Bolt Anchor designed for anchoring antenna guy wire in brick or masonry. Made of ¼" material, over-all length 2½", fits into hole, closing gap ½". Rust-proofed. Can only be used with our No. 1229 tamping tool shown on Page U-76b. No. 1227\$18.00 per C



EYE BOLT

Sturdy steel eye bolt for use where guy wire is necessary for T.V. mast installation. Inside diameter 23", shank length 18", thread length 116".

No. 1249 \$8.00 per C



BRIDLE RING

Heavy duty steel bridle ring %" long. Another essential item where guy wire is used in T.V. mast installation.

No. 1238 \$10.00 per C



ANCHOR BOLT

Rust-proofed anchor designed for lasting and permanent anchorage for fastening wall mounts and pipe straps to masonry. Free tamping tool with each 100 Bolts.

No.	Bolt Length	Per C
1246	2"	\$15.00
1247	3"	18.00
1248	4"	22.00



TOGGLE BOLT

A spring wing toggle bolt useful for mounting objects against hollow concrete. Clamp is galvanized steel and screw is 14" O.D. x 3" long.

No. 1223 \$22.00 per C



WOOD SCREW ANCHOR

Especially designed to give permanent anchorage in any kind of masonry for 300-ohm and coaxial stand-offs Tapped for wood screw. Free tamping tool with each 100 anchors.

\$11.00 per C No. 1226...



LAG BOLT

Size 14" x 1 14" Per C \$6.00

SMITH Electronic Components HERMAN H. SMITH, INC.

TELEVISION ANTENNA ACCESSORIES



MIDGET KNIFE SWITCHES

Midget knife switches ideal for use in rear of television receiver where two antennas are used. Screw terminals placed for easy connection and two holes in each type base for mounting.

No.	Туре	Type Base	Each
1241	SPST	Porcelain	\$0.40
1242	SPDT	Bakelite	.50
1243	DPST	Porcelain	.70
1244	DPDT	Bakelite	.80



MIDGET TURNBUCKLES

No.	Diameter of Bolt	Over-all Length Closed	Over-all Length Extended	List Price Each
1215	32 " 32 " 16 "	3 3/8 "	4 5% "	\$0.21
1216	3 "	4"	5 5% "	.23
1217 .	372 "	4 1/2"	6 3/8 "	.25
1218	1/4 "	5 1/2 "	7 5/8 "	.30
1219	16 "	6 3/4 "	9 1/4 "	.50
1220	3/8 "	7 ½"	10 ½"	.75

CARBIDE TIPPED MASONRY DRILLS



These drills are carbide tipped and have a spiral fluted body. It penetrates freely and easily, giving clean, accurate holes. Individually packed complete with operating instructions.

No.	Size	Each
1234	1/4 " 3/8 " 1/2 "	\$3.75
1236	3/8 ″	4.75
1235	1/2 "	6.00



TAMPING TOOLS

An absolutely essential item for T.V. antenna installation to insure proper setting of all anchor bolts in masonry.

No.	Description	Each
1228	No. 2 Tool for ¼" Bolts	\$2.00
1229	No. 6 Tool for Eye & Loop Bolts	4.75

LEAD ANCHORS FOR WOOD SCREWS



This is a new design anchor which gives greater holding power; requiring a smaller installation hole for the corresponding size screws. It takes

more sizes of screws grouped in a more convenient series than other designs. It also has a larger range of holding power through various sizes of hole diameters. These anchors are \(\frac{1}{6}^{\circ} \) O.D., take a 10-12-14 wood screw and are forced into a \(\frac{1}{6}^{\circ} \) or \(\frac{1}{4}^{\circ} \) hole.

	 11100 11 16 01 /4 110101	
No.	Length	Per C
1231	1‴	\$ 7.00
1239	1 1/2 "	10.00



RUBBER STAND-OFF

Made of $\frac{1}{2}$ %" heavy duty rubber, this stand-off is especially designed for either coaxial cable or standard twinlead cable. Fits on any mast or cross arm with O.D. varying from 1" to $1\frac{1}{2}$ ".

No. 1263 \$10.0	Oper (С
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PORCELAIN STAND-OFF

Made to accommodate twin 300-ohm lead-in wire. Moisture-Proof Porcelain maintains firm grip on wire. Screw for mounting in either wood or masonry.

No. 1245	\$20.00 per C

SOLDERIESS TERMINAL LUGS

These lugs are easily applied and do not require the use of any special tool. They are de-signed to give a trim appear-ance to an otherwise unsightly wire connection. They fold neatly over the stranding and confine it directly under bind-



ing screw or nut and automatically insure greatest possible contact. The cushion-like construction of these lugs, when closed, permits binding nut or screw to sink into the soft copper and so serves the purpose of a lock nut and is therefore vibration-proof. Packed 100 per box.

No.	Wire Size	Туре	Length	Per C
1459	18 to 14	Double Cup	16 "	\$3.50
1460	18 to 10	**	13 "	3.75
1461	18 to 10	** **	18 "	4.00
1462	18 to 14	Single Cup	1/4 "	1.50
1463	18 to 14	** **	3/8 "	1.75



AIRPLANE INSULATOR

White glazed, low absorption porcelain insulator 2" long.

No. 1283 \$9.00 per C



ANTENNA HANK

Cotton covered copper antenna hank.

No. 1222\$30.00 per C

ANTENNA CONNECTOR



For use as connection of auto radio antenna

lead-in to auto radio receiver.

No. 1300\$10.00 per C

FUSE RETAINER



Recommended for use in auto radio power supply cables.

No. 1301 \$15.00 per C

Parts for No. 1300 Antenna Connector and No. 1301 Fuse Retainer

No.	ltem	Per C
1305	Male Cap for No. 1300 and No. 1301	\$2.50
1306	Female Shell for No. 1300	2.50
1307	Contact for No. 1300 and No. 1301	2.50
1308	Spring for No. 1300 and No. 1301	.50
1309	Washer for No. 1300 and No. 1301	.40
1310	Insulating Tube for No. 1301	.60
1311	Female Shell for No. 1301	5.50

JUMBO FUSE HOLDERS



For use with Philco and Motorola Auto Receivers; all parts comprising bushings, springs, contacts, etc., are furnished un-assembled, packed in individual enve-

No.	Туре	Length	Each
1302	For 9 Amp.	2" Long	\$0.25
1303	For 14 Amp.	2 1/2 " Long	.30

THE NEW IMPROVED JFD REMOTE-O-CABLE REPLACER

The Most Efficient Auto Radio Tuning Cable-Servicing Machine in Use Today!

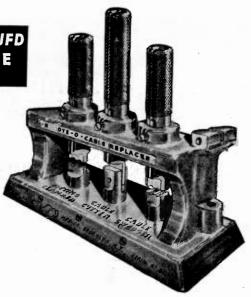
Completely redesigned to meet MOD-ERN Servicing requirements, the NEW JFD REMOTE-O-CABLE REPLACER is a vital necessity in the workshop of every auto-radio serviceman.

- 1. SWEDGES SHAFTING TO PRE-VENT UNRAVELLING.
- 2. CUTS SHAFTING TO EXACT LENGTH.
- 3. REPLACES OLD FITTINGS ON NEW SHAFTING.
- 4. CASING GROOVE MAKES CUTTING EASY.

ANY JOB PROMPTLY DONE AND DELIVERED—The Remote-O-Cable Replacer + 50 feet of shafting and casing + an assortment of fittings and you are fully equipped.

USE OLD FITTINGS ON NEW SHAFTING-No need to wait for special lengths or odd fittings.

NO DELAY-Shafting of any length immediately available.





SERVICEMEN'S NET COST \$67.52

Size: Length, 10½". Width, 4¼". Height, 13". Weight, 29¼ (bs.

NO LOSS OF HEADS OR SHAFTING—Shafting of any make radio immediately changed to fit any dashboard head. π

FRONT—REAR—ANYWHERE—Radio control in any part of the car.

EXACT LENGTH OF SHAFTING DOES IT-Maximum tuning efficiency.

AUTO RADIO CONTROL SHAFTING AND CASING



UNSWEDGED

Type CB
.130 gauge
\$0.18 per ft. List
Type CA
.150 gauge
\$0.23 per ft. List

NON-RAVELLING DEAD SHAFTING

Type CD .130 gauge \$0.20 per ft. List Type CC .150 gauge \$0.26 per ft. List

CASING FOR

Type HB .130 gauge \$0.18 per ft. List Type HA .150 gauge \$0.23 per ft. List



AUTO RADIO CONTROL SHAFTING AND CASING CUT TO LENGTH

.130 CABLE AND CASING - List Prices

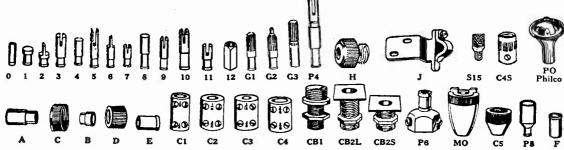
E	18"	24"	30"	36"	42"	48"
Shafting only CB .130 Gauge	\$0.50	\$0.60	\$0.71	\$0.81	\$0.92	\$1.02
Casing only HB for ,130 Gauge	.50	.60	.71	.81	.92	1.02
Shafting & Casing Complete CB HB -130	1.00	1.20	1.42	1.62	1.84	2.04

.150 CABLE AND CASING — List Prices

	18"	24"	30"	36"	42"	48"
Shafting only CA .150 gauge	\$0.57	\$0.70	\$0.84	\$0.96	\$1.10	\$1.22
Casing only HA for .150 gauge	.57	.70	.84	.96	1.10	1.22
Shafting & Casing Complete CA HA .150	1,14	1.40	1.68	1.92	2.20	2.44



Auto Radio Tuning Cable Fittings Gear & Couplers



 Nos. 0, 1, 7, B, E.
 Lots of 20 @ \$0.10 ea, List

 Nos. C, D
 Lots of 20 @ .10 ea, List

 Nos. 2, 4, 8, 11, F.
 Lots of 20 @ .10 ea, List

 Nos. 3, 5, A
 Lots of 20 @ .13 ea, List



Improved • Air-Cooled AC-DC Adjustable Ballasts

3 Adjustable Ballasts Replace Over 3000 Exact Duplicate AC-DC Resistance Tubes!







Dealer's and Serviceman's Kit

Improved • Air-Cooled

AC-DC Adjustable Ballasts

No. 770-SERVICEMEN'S KIT

contains 5 Ballasts: 2 Type A, 2 Type B, 1 Type C Ballasts together with listing of over 2500 replacements and complete instructions......List Price \$7.50

JFD IMPROVED AIR-COOLED ADJUST-ABLE AC-DC BALLASTS HAVE THESE IMPROVEMENTS:

- 1. Air-Cooled Perforated Shell
- 2. Larger Insulating Surface
- 3. Longer Life, Heavier Resistance Wire
- 4. Exact Adjustments made

LIST \$1.50 ea

Over 3,000,000 JFD Adjustable Ballasts have been sold since 1934 — practically every one still in use, giving service and satisfaction.

GET THIS FREE AC-DC BALLAST TUBE MANUAL!

Contains valuable information on how to adapt adjustable ballasts to all service jobs. Simply send 12 flaps from JFD Dial Belt envelopes and 10c in stamps (to cover mailing) to JFD MANU-FACTURING CO. INC., 4117 Ft. Hamilton Parkway, Brooklyn 19, New York, U. S. A. (Further Details on Page 37.)



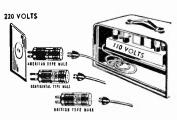
USE JFD	TO REPLAC	E AC-DC RESISTA	NCE TUBES
BALLASTS	Beginning with Letter	With Numbers Including	Ending with letter
"A" Ballasts	K, L, M, BK, BL, or BM	6 through 42	A, B, C, D, F, G, or H
"B" Ballasts	K, L, M, BK, BL, or BM	45 through 105	A, B, C, D, F, G, H, S1, S2, S3
"C" Ballasts	All 4 prongs	80 through 350	R. R4, R8, L, L4, L8

AC-DC STANDARD TUBES_RMA STANDARD CODING

Type List No. Price	Type List No. Price	Type List No. Price	Type List No. Price	Type List No. Price	Type List No. Price
No. Price 10A Addison \$1.00 17A 1.00 K17B 1.00 K17C 1.00 L17C 1.00 K22B 1.00 K22B 1.00 K23B 1.00 L23C 1.00 33A 1.00 33AG 1.00	No. Price M36B 1.00 M36C 1.00 M36D 1.00 42A 1.00 42B2 1.25 K42B 1.00 K42BJ 1.25 BK42B 1.00 BL42B 1.00 K42C 1.00 BK42C 1.00 BL42C 1.00	No. Price M42D 1.00 M42E 1.00 M42F 1.00 M42H 1.00 K49B 1.00 K49BJ 1.25 BK49B 1.00 K49C 1.00 BK49C 1.00 K49CJ 1.25 K49D 1.00	No. Price L49B 1.00 L49BJ 1.25 L49C 1.00 L49CJ 1.25 L49D 1.00 L49DJ 1.25 L49E 1.00 L49F 1.00 LX49B 1.25 LX49C 1.25 LX49C 1.25 LX49C 1.25 LX49D 1.25 M49B 1.25 M49B 1.00	No. Price BK55D 1.00 K55F 1.00 K55H 1.00 KX55A 1.25 KX55B 1.25 KX55C 1.25 L55B 1.00 L55C 1.00 L55CP 1.25 L55D 1.00 L55F 1.00 L55F 1.00 L55F 1.00 L55F 1.00	No. Price M73B 1.00 K74B 1.00 K74C 1.00 K74D 1.00 80A 1.00 K80B 1.00 K80C 1.00 K80D 1.00 K80F 1.00 K80H 1.00 L80B 1.00
36A 1.00 K36B 1.00 BK36B 1.00 K36BJ 1.25 K36C 1.00 K36D 1.00 K36H 1.00 K36A 1.25 KX36B 1.25 KX36B 1.25 L36B 1.00 L36C 1.00 L36D 1.00 L36DJ 1.25	K42D 1.00 BK42D 1.00 KX42A 1.25 KX42B 1.25 KX42C 1.25 L42B 1.00 L42BJ 1.25 L42C 1.00 L42CJ 1.25 L42D 1.00 L42DJ 1.25 L42E 1.00 M42B 1.00 M42C 1.00	BK49D 1.00 K49F 1.00 K49H 1.00 K49H 1.00 KX49A 1.00 KX49B 1.25 KX49C 1.25 KX49D 1.25 KY49A 1.25 KY49A 1.25 KY49A 1.25 KY49A 1.25 KY49B 1.25 KY49C 1.25 KZ49A 1.25 KZ49A 1.25 KZ49A 1.25 KZ49A 1.25 KZ49A 1.25	M49C 1.00 M49D 1.00 M49H 1.00 50 1.00 K52H 1.00 55A 1.00 K55B 1.00 BK55B 1.00 BK55B 1.00 BK55B 1.00 BK55B 1.00 BK55C 1.00 K55D 1.00	M55B 1.00 M55D 1.00 M55D 1.00 M55H 1.00 60R30 1.25 62A 1.00 K67B 1.00 K67BJ 1.25 K67C 1.00 K67D 1.00 K72B 1.00 K72B 1.00	L80C 1.00 M80B 1.00 M80C 1.00 K87B 1.00 90A 1.00 K90B 1.00 K90C 1.00 K92A 1.00 K92C 1.00 K92C 1.00 K92C 1.00 K92C 1.00 K92C 1.00 K92F 1.00 K92H 1.00



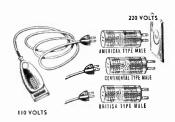
FROM 220 VOLTS TO 110 STEP-DOWN VOLTS











JFD STEP-DOWN BALLAST

Use JFD voltage reducing ballasts on 220 volt current supply if you want to operate 110 volt appliances. Excellent for radios, floor lamps, clocks, therapeutic lamps, electric blankets, etc.

Catalog No.	Resist.	Current	Voltage Drop	Watts	Male End	Female End	Load	List Price
450	97	1.13	220-110	125	American	American	125 W Imra Red Therapeutic Lamp	\$2.40
451B	97	1.13	220-110	125	British	American	125 W Infra Red Therapeutic Lamp	2.40
451C	97	1.13	220-110	125	Continental	American	125 W Infra Red Therapeutic Lamp	2.40
456	250	.44	220-110	65	American	American	35-65 W Radio Heating Pads	2.40
457B	250	.44	220 - 110	65	British	American	35-65 W Radio Heating Pads	2.40
457C	250	.44	220-110	65	Continental	American	35-65 W Radio Heating Pads	2.40
458	300	.35	220-110	38	American	American	4-5 Tube AC-DC Radio, .3 Amp tubes	2.40
459B	300	.35	220-110	38	British	American	4-5 Tube AC-DC Radio, .3 Amp tubes	2.40
459C	300	.35	220-110	38	Continental	American	4-5 Tube AC-DC Radio, .3 Amp tubes	2.40
462	500	.22	220-110	25	American	American	General Use	2.40
463B	500	.22	220-110	25	British	American	General Use	2.40
463C	500	.22	220-110	2.5	Continental	American	General Use	2.40
464	560	.20	220-110	2.5	American	American	5 Tube AC-DC Radio Using .15 Amp tubes	2.40
465B	560	.20	220-110	25	British	American	5 Tube AC-DC Radio Using .15 Amp tubes	2.40
465C	560	.20	220-110	25	Continental	American	5 Tube AC-DC Radio Using .15 Amp tubes	2.40
466	660	.167	220-110	8	American	American	General Use	2.40 2.40
467B	660	.167	220-110	8	British	American	General Use	
467C	660	.167	220-110	8	Continental	American	General Use Electric Razor	2.40 2.40
468	1345	.082	220-110	9	American	American		2.40
469B	1345	.082	220-110	9	British	American	Electric Razor Electric Razor	2.40
469C	1345	.082	220-110	9 2	Continental	American	Electric Clock	2.40
470 471B	6000 6000	.018	220-110 220-110	2	American	American American	Electric Clock	2.40
471C	6000	.018	220-110	2	British	American	Electric Clock	2.40
4710	110	.018 $.950$	220-110	_	Continental	American	15-7 Watt Xmas lights in parallel	2.40
472 473B	110		220-110	$\begin{array}{c} 105 \\ 105 \end{array}$	American	American	15-7 Watt Xmas lights in parallel	2.40
473C	110	.950 .950	220-110	105	British	American	15-7 Watt Xmas lights in parallel	2.40
474	960	.115	220-110	13	Continental American	American	Schick Razor	2.40
475B	960	.115	220-110	13	British	American	Schick Razor	2.40
475C	960	.115	220-110	13	Continental	American	Schick Razor	2.40
476	1100	.1	220-110	11	American	American	Packard Razor	2.40
477B	1100	.1	220-110	11	British	American	Packard Razor	2.40
477C	1100	.1	220-110	iî	Continental	American	Packard Razor	2.40
478	475	.230	220-110	26	American	American	6 tube AC-DC Radio Using .15 Amp tubes	2.40
479B	475	.230	220-110	26	British	American	6 tube AC-DC Radio Using .15 Amp tubes	2.40
479C	475	.230	220-110	26	Continental	American	6 tube AC-DC Radio Using .15 Amp tubes	2.40
480	300	.300	220-110	33	American	American	Remington Razor	2.40
481B	300	.300	220-110	33	British	American	Remington Razor	2.40
481C	300	.300	220-110	33	Continental	American	Remington Razor	2.40
482	785	.140	220-110	16	American	American	Portable Radio Total Current drain .140 Amp.	2.40
483B	785	.140	220-110	16	British	American	Portable Radio Total Current drain .140 Amp.	2.40
483C	785	.140	220-110	16	Continental	American	Portable Radio Total Current drain .140 Amp.	2.40
484	430	.255	220-110	28	American	American	Detrola Automatic Phono Turntable	2.40
485B	430	.255	220-110	28	British	American	Detrola Automatic Phono Turntable	2.40
485C	430	.255	220-110	28	Continental	American	Detrola Automatic Phono Turntable	2.40
488	2000	.055	220-110	6	American	American	General Use	2.40
489B	2000	.055	220-110	6	British	American	General Use	2.40
489C	2000	.055	220-110	6	Continental	American	General Use	2.40
490	143	.87	220-110	96	American	American	65-130 Watt 110 Volt Radio	2.40
491B	143	.87	220-110	96	British	American	65-130 Watt 110 Volt Radio	2.40
491C	143	.87	220-110	96	Continental	American	65-130 Watt 110 Volt Radio	2.40

JFD FOREIGN ADAPTER

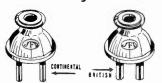


Converts American Male Plug to Continental and British Male Plugs Converts Foreign receptacles into the standard American type—in a jiffy!

No. 2-449-with Continental type prongs. List Price\$0.33 No. 2-450-with British type prongs.

List Price\$0.33

JFD Bakelite Handle Cap for Use in Foreign Countries



Comes with Continental or British Prongs

No. 2-451—Cap with	Continental t	ype F	List Price
prongs		\$1	0.25
2-452-Cap with	English type	prongs	.30

JFD Wire Measuring Outfit

(COUNTER MODEL)



Here is a compact, sturdy wire measuring outfit that can be set up easily on counter, bench or table. More than pays for itself in time saved and exact wire measurements. Measures up to 1000 feet. Very simple to set up and operate—it works silently. Takeup reel is adjustable.

Cat. No. 66-C Complete Outfit



New Enlarged Line of AC-DC RESISTANCE LINE CORDS

STANDARD 3 TERMINALS AC-DC RESISTANCE CORDS

FLEXIBLE, STURDY CORDS, 3-TERMINAL TYPE, WITH COLOR-CODED, TINNED LEADS



NO.	Onnis		LISE
*2180	 135		\$1.17
*2181	 160		1.17
*2182	 180		1.17
*2183	 200		1.17
2184	 220		1.17
2185	 250		1.17
2186	 290		1.17
2187	 300		1.17
2188	 330		1.17
2189	 350		1.17
2190	 390		1.17
2450	 450	(High Resist.)	1.72
		, ,	

Attractive individual Cartons

*Note: 135, 160, 180, and 200 ohm cords can also be used for single light 20 and 15 watt fluorescent fixtures.

TAPPED 4 TERMINAL AC-DC RESISTANCE CORDS

1.38

1.38

1.38

Pilot light resistor shunt built into the line cord. Used on Emerson, Zenith, Sparton, R. C. A., General Electric, Wells-Gardner, Sears Roebuck, Fada, Admiral, Air King, Detrola, Crosley, Garod, and others.



No. 2176-160 OHMS-TAPPED AT 24

OHMS

For sets using tubes having a voltage drop of approximately 69 volts as 2-25 volt tubes and 3-6.3 volt tubes plus single pilot light or similar combination \$1.38

2195-165 OHMS-TAPPED AT 30 OHMS

There is a large demand for this 1.38 tapped line cord

2177-180 OHMS-TAPPED AT 25 OHMS

For sets using tubes having a voltage drop of approximately 63 volts as 2-25 volt tubes and 2-6.3 volt tubes plus a single pilot light or similar combination

2178-200 OHMS-TAPPED AT 25 OHMS

For sets using tubes having a voltage drop of approximately 57 volts as 1-25 volt tube, 1-12 volt tube and 3-6.3 volt tubes and a single pilot light. May also be used for sets using tubes having a voltage drop of 63 volts, (2-25 volt and 2-6.3 volt tubes) if high line voltage (125 volts) is encountered

2179-200 OHMS-TAPPED AT 40 OHMS

For sets using tubes having a voltage drop of approximately 57 volts as 1-25 volt tube, 1-12 volt tube and 3-6.3 volt tubes and two pilot lights in series

List, Ea. | No. 2174—280 OHMS—TAPPED AT 40 OHMS

> For sets using tubes having a voltage drop of approximately 32 volts as 2-12 volt tubes and 1-6.3 volt tube or 5-6.3 volt tubes or similar combinations using 2 pilot light in series \$1.38

2164-360 OHMS-TAPPED AT 80 OHMS Used in Garod Model BP-20, See

No. 2196 for specifications 1.72 2166-430 OHMS-TAPPED AT 80

OHMS For Farnsworth Model CD59. See No. 2196 for specifications

2156-510 OHMS-TAPPED AT 80 OHMS

For Fada, See No. 2196 for specificastions 1.72

2196-560 OHMS-TAPPED AT 80 OHMS

Tapped at 80 ohms for plate of rectifier. Designed with voltage dropping resistor to plate of rectifier. Avoids necessity of using B+ resistor. This cord used extensively

2158-960 OHMS-TAPPED AT 80 OHMS

For G. E. Model L622. See No. 2196 for specifications

2165-1950 OHMS-TAPPED AT 360 OHMS

Used extensively in sets such as Crosley Model 27BD, Admiral Model 28-G-5, and other sets with similar circuits

HIGH RESISTANCE CORDS



List

\$1.72

1.72

List

\$2.06

97 For 3-way portable radios. AC-DO battery. New high resistance type cord, has 560 ohms resistance, Many thousands of sets using this 2197 identical cord are now in use. This popular replacement cord should be stocked by every serviceman! Individually packaged

2157-For AC-DC Sets.

This cord has 960 ohms resistance, and is used wherever 45Z3 rectifier tube is employed. (For pocket type radios, such as: Admiral, Fada Sentinel, Sonora, Motrola, Detrola, Farnsworth, etc.) Individually pack-

REPLACEMENT LINE CORD FOR MOTOROLA SETS



2198—8 ft. cord containing 2 resistance elements—1100 and 280 ohms. Has 4 terminals. Essential replacement for all Motorola portables. Nos. 41D, 51D, 52D, 41H.

COMBINATION ANTENNA WIRE and STRAIGHT AC CORD



2168-3-wire cord with special female socket to fit sets which have three prong male plug, used in Sentinel, Admiral, Belmont, Sonora, etc. Individually packaged \$1.72

UNIVERSAL AC-DC RESISTANCE LINE CORDS



2.06

2175-This line cord replaces AC-DC cords from 220 ohms to 300 ohms. Can be used for either standard three terminal or tapped cord

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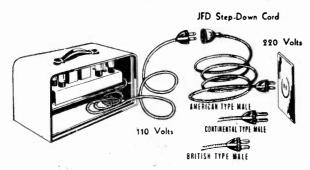
Price

\$1.72



STEP-DOWN — AC-DC RESISTOR LINE CORDS

(Step-Down from 220 V. to 110 V.) JFD STEP-DOWN LINE CORDS FOR RADIOS

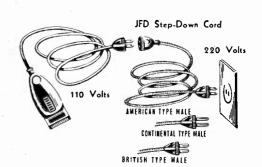


Cat. No	Description	List Price
2432C	220V-110V Stepdown for 6 tul	
	drawing .150 amps. Continents and American Female Plugs	

Cat. No	Description Lis	t Price
2191	220V-110V Stepdown for 4, 5, 6 tube sets drawing .3 amps. American Male Plug	
2193C	drawing .3 amps. Continental Male	•
0.400=	Plug	
2193B	220V-110V Stepdown for 4, 5, 6 tube sets drawing .3 amps. British Male Plug	
2192	220V-110V Stepdown for 5 tube sets drawing .15 amps. American Male Plug	
2194C	220V-110V Stepdown for 5 tube sets drawing .15 amps. Continental Male Plug	
2194B		
21340	220V-110V Stepdown for 5 tube sets drawing .15 amps. British Male Plug	
2430A	drawing .150 amps. American Male)
	and Female Plugs	
2431B	drawing .150 amps. British Male and	
	American Female Plugs	2.40

JFD STEP-DOWN LINE CORDS FOR ELECTRIC RAZORS

Cat. N	o. Description	List Price
2203	220V-110V Stepdown for Remington Ram 15W. American Female and American	
2203B	220V-110V Stepdown for Remington Rand 15W. American Female and British Ma	l Razor
2203C	220V-110V Stepdown for Remington Rand 15W. American Female and Continenta	l Razor
2204	220V-110V Stepdown for Schick Razor 9 beam Shavemaster 15W, Williams Shaver, Gillette, Gem 10W with Ar Female and American Male	W, Sun- Roto- merican
2204B	220-110V Stepdown for Schick Razor 9V beam Shavemaster 15W, Williams Shaver, Gillette, Gem 10W with Ar Female and British Male	V, Sun- Roto- nerican
2204C	220V-110V Stepdown for Shick Razor 9V beam Shavemaster 15W, Williams Shaver, Gillette, Gem 10W with Ar Female and Continental Male	V, Sun- Roto- nerican
2205	220V-110V Stepdown for Packard Razor 6	W with
2205B	, , copao , n for facilità telezor o	W with
	American Female and British Male	2.60



Description List Price 2205C 220V-110V Stepdown for Packard Razor 6W with American Female and Continental Male \$2.60

JFD AC-DC LINE CORDS FOR FLUORESCENT FIXTURES



		Price
2181FL	165 ohm, for 20 watt bulb, 117 volts, 6 feet long	\$1.17
2181FL-2	Two 165 ohm windings, for two 20 watt bulbs, 117 volts, 6 feet long	
2182FL	180 ohm, for 15 watt bulb, 117 volts, 6 feet long	
2200FL	Two 180 ohm windings, for two 15 watt bulbs, 117 volts, 6 feet long	



GENERAL CEMENT RADIO CEMENTS FOR ALL PURPOSES











G-C RADIO SERVICE CEMENT

The best Cement for repairing radios and speakers. Excellent for repairing and replacing torn cones. Vibration-proof, water-proof

and fa	st arying.	brushes attached.	
No.			List
30-2	2-oz.		\$0.50
34-2	Tube		.50
30-4	4-oz.		1.00
30-6	6-oz.		1.40
30-8	8-oz.		1.75
30-16	16-oz.		3.30

G-C RADIO SERVICE SOLVENT

Best Solvent for looscement ening cement on speaker cones, frames, etc. Will dissolve all cements on speakers.

attache	
	List
2-oz.	\$0.50
4-oz.	.65
6 · oz.	.85
8-oz.	.95
16-oz.	1.40
	2-oz. 4-oz. 6-oz. 8-oz.

G-C CEMENT THINNER

Made of same solvents as G-C Service Cement. Best thinner for all cements.

No.		List
28-2	2-oz.	\$0.50
28-4	4-oz.	.65
28-8	8-oz.	.95
28-16	16-oz.	1.40

G-C SPEAKER CEMENT

Best grade cement put up in handy tubes. For radio and speaker repairs. Water-proof, vibration-proof, fast drying.

No.		List
34-2	2-oz. Tube	\$0.50

G-C PLASTIC CEMENT

For cementing broken plastic cabinets, knobs, dial and crys-tal assemblies, grille cloth, etc. Fast dry-ing. Brush attached.

No.		List
32-2A		\$0.60
32-8A		1.75
32-16A	16-oz.	3.30













G-C BAKELITE CEMENT

For cementing bake-lite to bakelite and bakelite to other ma-terials. For repairing knobs, cabinets, panels, for inserts in moldings, attaching labels to plastics, etc. Brush attached.

No. 32-2 32-8 32-16	2-oz. 8-oz.	List \$0.60 2.20 4.15
32-16	16-oz.	4.15

G-C RUBBER TO

METAL DIAL DRIVE CEMENT

For cementing rubber drives to shafts, rub-

ber mountings, gas-kets, hose, weather stripping, for radios, refrigerators, autos,

Tube 4-oz.

8-oz.

RUBBER CEMENT

for artist and layout work. Will not stain

or shrink paper, can be easily removed. Handy for panel lay-out, photo mounting,

4-02.

Transparent,

rubber

etc. No. 35-2 35-3 35-4 35-8

G-C VINYLITE CEMENT

Clear transparent adhesive, air drying. For cementing metals, plastics, paper, leather, etc. Used also as thermoplastic cement for non-porous materials. Sets on cooling. Brush attached.

G-C HOUSEHOLD & MODEL CEMENT

Best cement for mod-Best cement for mod-el makers, household, and office use. For airplanes, railroads, ships, toys, etc. Will cement wood, paper, plastics, metal, china, ceramics, etc. Fast drying, water-proof. drying, water-Brush attached.

No. 45-2 2-oz. 45-3 Tube \$0.50 Tube

G-C FABRIC TO METAL CEMENT

For cementing cloth and felt to metal or plastics. Best for grille cloth, phono turntable felts, upholstering, fabrics, etc. Fast drying, water-proof.

22-4 4-oz. \$0.7 22-8 8-oz. 1.0 22-16 16-oz. 1.9
--

G-C GRAY RUBBER CEMENT

General purpose for cloth, paper, rubher, etc. Has great tackiness and adhesion for radio, shop, auto, or hobby use.

No.		List
23-4	4-oz.	\$0.70
23-8	8-oz.	1.00
23-16	16-oz.	1.95

G-C GRILLE CLOTH CEMENT

Rubber have cement for grille cloth, leatherette, fabric, uphol-stering, etc. Will not penetrate, stain, or shrink.

No.		List
38-4	4-oz.	\$0.70
38-8	8-oz.	1.00
38-16	16-oz.	1.95





G-C WOOD

GLUE

New white resin wa-

ter-proof glue for ra-

dio cabinets, furni-

ture, chairs, etc. Will

not injure finish. Ex-

2-oz.

4-oz.

8-oz.

List

\$0.60

1.00

1.65

tra strong.

39-16 16-oz

39-2

39-4

39-8



G-C ELECTRICAL AND RESISTOR CEMENT

Heat-proof cement, hardens like porcelain. Same as on resistors, flat irons, etc.

No. List 27-2 2-oz. \$0.60



G-C FILM CEMENT

New improved cement for all safety and nitrate film. Sets fast. Brush attached.

List No. 33-1 1-oz. \$0.40



G-C ACRYLIC CEMENT

Welds and cements lucite, plexiglass, and other acrylic materials. Strong, fast drying. Brush attached.

No. List 40-2 2-oz. \$0.60



G-C LABEL CEMENT

Sticks labels to anything - metal, glass, wood, tin, bakelite, plastics, etc. for cementing labels to bins, racks, waterproofing labels, etc.

No.		List
46-2	2-oz.	\$0.60
46-8	8-oz.	1.50



\$0.50 .50 1.00

1.75 3.30

pure,

\$0.50

cement



G-C No. 67 PAINT THINNER

For Ruf-Koat, Krome-Koat, B-K Cement, Insulating Varnish. Rubber Cements, and ordinary paints.

No.		List
67-2	2-oz.	\$0.50
67-4	4-oz.	.65
67-8	8-oz.	.95
67-16	16-oz.	1.40



G-C Q-DOPE THINNER

Will cut and dissolve Q-Dope and other pol ystyrene coil dopes and cements. Will soften and weld polystyrene rods tubes, sheets, etc.

No.		List
41-2 41-4 41-8	4-oz.	\$0.50 .65 1.00



G-C LACQUER THINNER

Will thinall lacquers, lacquer enamels, telephone black or gray, touch-up lacquers, touch-up lacquers, airplane dopes, model cements, etc.

No.		List
29-2	2-oz.	\$0.50
29-4	4-oz.	.65
29-8	8-oz.	.95
29-16	16-oz.	1.40



G-C SAMPLER KIT

What kind of cement shall I use? Get this kit and experiment with all types of cements available. Cements for all applications included so you can try them yourself for your application. Save time - get the answer quicker. 10 - 2.oz. bottles in Kit.

No.		List
345	Kit	\$6.00

33-8 8-oz. 33-16 16-oz.

etc. No. 33-4 33-8



RADIO CHEMICALS













G-C COIL DOPE KIT

For high frequency coils, ultra low loss. Contains 2-oz. bottle Polystyrene Q-Dope, 2-oz, Thinner, and 2 brushes. The best!

No. List 888 Kit. \$1.00

G-C CEMENT & SOLVENT KIT

"Handy to carry with you." Contains bottle G-C Radio Cement and G-C Solvent, with brushes.

No. List 343 Kit \$0.75

G-C CONTACT & ATTENUATOR KIT

For cleaning and lubrigating attenuator. tunners, contacts, allwave switches, condenser bearings, etc. Eliminates noise and prevents corrosion.

777 Kit \$1.00

G-C INSULATING & DIPPING VARNISH

For treating field coils, noisy or buzzing transformers and chokes. Air dries to a tough insulating film. Can be brushed or dipped.

No. 56-2 56-4 2-02. \$0.60 4-oz. .85 1.10 8-02 56-16 16 oz. 1.95

G-C LIQUIDOPE

All wave nitrocellulose base dope for coils. Air dries fast to tough film, that insures toughness and firmness. Use for sealing, doping, supporting coils, etc.

No. 2-oz. \$0.60 36-2 36-8 8-oz. 1.40 2.50 36-16 16-oz.

G-C Q-DOPE

Liquid polystyrene ultra low loss coil dope for RF, UHF, and VHF components. Will not change R.F. circuit values. Performs — 70°F to 160°F. Also use as Polystyrene Cement.

No.		List
37-2	2-oz.	\$0.60
37-4	4-oz.	.85
37-8	8-oz.	1.40
37-16	16-oz.	2.50









G-C FUNGUS VARNISH

Used on radio equipment and instruments to insulate and prevent fungus growth in moist or humid climates. Air dry, brush or spray.

No. List 57-2 \$0.60 2-0z 57-8 8-oz. 57-16 16-oz. 1.10

G-C CONTACT & CRYSTAL CLEANER

Extra pure cleaner. Fast drving for cleaning contacts and crystals. Will not injure delicate parts.

List No. 2-oz. \$0.50 127-2 127-4 127-8 4-oz. .65 .85 8-oz. 127-16 16-oz. 1.20

G-C RED ELEC-TRONIC CON-TACT CLEANER

The best and only allpurpose cleaner. Dis-solves the dirt and removes corresion. Leaves protective film on contacts to prevent corrosion.

No. List 210-2 2-oz. \$0.50 4-oz. 8-0%. 210-16 16-oz.

G-C RADIO CHASSIS **CLEANER**

Clean the chassis and make extra money on every repair job. Satisfy your customer. For radio chassis, panels, testers, etc. Non-explosive cleaner,

No. List 123-8 8-oz. \$0.76 123-16 16-oz. 1.10 123-G 1 Gal. 4.25

G-C CARBON TETRA-CHLORIDE

100% pure for cleaning and degreasing electrical contacts controls, motors. Absolutely safe — will not burn. Also kills bugs, roaches, ets.

No. 211-2 2-oz. \$0.50 211-4 211-8 .65 .95 4-oz. 8-oz. 211-16 16-oz. 211-32 32-oz. 211-G 1 Gal. 1.65

G-C CONTACT DOPE

Ideal cleaner and lubricant for switches, controls and contacts. Resists corrosion and oxidation. Eliminates noise.

No. 1213 Tube 1214 2-oz. List \$0.40 .60

CARB-O-TET

Specially made from 100% Carbon - Tet materials, 215-G 1 Gal. \$4.15















G-C CARBON CONTROL CLEANER

Fix noisy carbon controls without taking abart. Just squirt cleaner along shaft and job is done. Save money. Applicator money. supplied.

List 212-2 2-oz.

G-C GRAFOLINE Noiseless lubricant

for air exposed switch contacts, rheostats, relays, wire volume controls, tube prongs, etc. Increases current capacity of switch controls. Cleans also.

List No. 120-2 2-oz. \$0.60

G-C CARBON-X

New improved formula. Fix those old noisy carbon controls, touch up noisy spots on worn controls. Brush in bottle.

Nο List 1204 \$0.75 1-02 1.00 1205 2-oz.

G-C LUBE-REX

Lubriplate - white lubricant for push Lubriplate lubricant for push buttons, phonographs, Phileo mystery conguns, fishing trols. guns, fishing reels, dials, etc. Pre-vents corrosion, re-pels water.

1206 2-oz. Tube\$0.60 1209 2-oz. Bottle .60

G-C SILICONE COMPOUND

"The miracle moisture and waterproofing compound for Television and FM" A permanent water-proofing material for TV and FM leads.

No. 81001-oz. Tube \$1.65 Dealer's Net .99

G-C LIQUID SOLDER FLUX

Non-corrosive flux for radio and electrical work. Solders faster, amouther

No. List 42-2 2-oz. \$0.60 42-8 8-oz. 1.75





G-C CHEMICAL LABORATORY

Complete assortment of 20 popular radio chemicals and cements in 2-oz, bottles, put up on steel rack. Very neat for the radio bench and home work shop. Rack sets on bench or hangs on wall. Steel Rack is FREE.

No. 997 Lab

List \$11.70 Dealer's Net 6.99

G-C CHEMICAL KIT

Pocket size kit of 8 popular radio chemicals and cements, for fast repairs on the job. Put up in neat leatherette case. Easy to carry. No. 999 List \$3.30

- Refills available at your jobbers -

G-C DELUXE CHEMICAL LAB

Practical larger laboratory of popular chemicals and cements to fit needs of average shop — 2-oz., 4-oz., and 8-oz. bottles. Larger bottles of more popular items. Rack sets on beach or hangs on wall. Steel rack is FREE.

No. 998

List \$14.30 Dealer's Net 8.49



GENERAL PAINTS—KITS—COMPOUNDS













G-C RUF-KOAT WRINKLE VARNISH

Air Dry or Bake

The only finish that will air dry and give professional wrinkle job without baking. Same as used by leading manufacturers. Don't experiment — use the best. Apply and let dry. Colors: Black Gray, Brown, Green, Red and Blue (Specify Color).

No.		List
60-2	2-oz.	\$0.60
60-4	4-oz.	1.00
60-8	8-oz.	1.75
60-16	16-oz,	3.00

G-C KRYSTAL KOAT CRYSTAL LACQUER

Makes beautiful floral pattern when dry. Strictly air drying.

For chassis, panels, decorations on metal, wood, paperete.

Colors: Black Gray,
Brown, Green, Red. Blue and
Clear. (Specify Color).

Clear.	(Sheen)	Color).
No.		List
63-2 63-4 63-8 63-16	2-0z. 4-0z. 8-0z. 16-0z.	\$0.60 1.00 1.75 3.00

G-C TELEPHONE BLACK OR GRAY

High grade lacquer enamel covers well, dries fast. Black is satin ebony finish similar to telephones. Gray is pleasing shade. For panels, racks, parts, etc. (Specify Color).

No.		List
62-2	2-oz.	\$0.60
62-8	8-oz.	1.40
62-16	16-oz.	2.50

G-C GENERAL SCRATCH STICK

Removes scratches. Simply run over scratches and they will disappear. Handy to carry in your pocket or tool box for emergency repairs. Also sell to housewives

No.			List
909	Seratch	Stik	\$0.40
909-D	Display	12 Stil	ks 4.80











G-C KROME-KOAT ALUMI-NUM PAINT

drying, Fast ready Fast drying, ready mixed, leaves chrome-like finish. For PA equipment, speakers, chassis, towers, an-tennas, etc.

No.		List
61-2	2-oz.	\$0.60
61-4	4-0z.	.85
61-8	8-02.	1.40
61-16	16-oz.	2.20
	- 5	

G-C PORCELAIN GLAZE

Fills in nicks and dents on porcelain and duco refrigerators, sinks, washing machines, etc. Fill in and let dry.

No.	List
911 911-16	\$0.60 3.85

VARNISH

Fast drying walnut spirit varnish for touching up nicks and scratches. Will not raise the finish.

No.		List
161-2 161-4 161-8 161-16	4-0z. 8-0z.	\$0.60 .85 1.40 2.20

PENETRATING STAIN

Spirit type stain, penetrates and will not injure finish. Covscratches, dents, darken corners on cab-inets, etc. Walnut.

No.		List
162-2	2-02.	\$0.50
162-4	4-0Z.	.85
162-8	8-oz.	1.40
162-16	16-oz.	2.20

MICROPHONE CARBON **GRANULES**

Polished pure carbon granules for microphones.

No. List 1281 100 Size \$0.80 Highest Sensitivity 1282 80 Size .80 Best for General Use
1283 60 Size .80
Best for Hard Use —
Sound Trucks, etc. .80

G-C SCRATCH REMOVER LIQUID

New liquid! Removes scratches instantly. Simply wipe over scratches. Handy to have in tool box.

No.		List
917	2-0%.	\$0.50
923	½ -oz.	.30











G-C RMA COLOR CODING KIT

Complete kit of all standard RMA colors to code resistors, condensers, parts, etc. Chart included. Ten bottles.

No. 677 List \$1.95

G-C TOUCH UP CODING KIT

Five bottles, 4 colors and solvent for coding and sealing parts, adjustments, wires, etc. Red, Green, Blue, Yellow and Solvent.

No. 675 List \$0.85

G-C DIAL LITE COLOR KIT

Long lasting coloring for dials signals, lamps, panels, hobby work, etc. Red, Green, Blue, Amber, Pur and Solvent in kit. l'urple

No. List 66-6 Kit no Kit no .85 \$1.00 66-5 purple .8: 2-oz. (Spec-66-2 ify color)

.60 66-16 16-oz. (specify color) 2.50

G-C LUMINOUS KITS Complete kits of lu-

minous paint that glows in the dark. Many uses in shop and home. See it at night.

Easy to use — apply and let dry.

No. List 184-0 DeLuxe kit contains Powder, Mix-Koat, Top Koat and Brush,

\$2.50 184-1 Regular kit Powder, contains Po Brush \$1.65

G-C LUMINOUS MATERIALS LITE-KOAT POWDER

No, List \$0.95 185-2 2-oz. 1.65

KOVER-KOAT

To protect and cover luminous material.

No.		List
187-2	2-0%.	\$0.60
187-8	8-0%.	1.25

MIX-KOAT

To mix with powder. No. List 186-2 2-oz. \$0.60 186-8 8-oz. 1.25

MIX-KOAT AND KOVER-KOAT THINNER

List 2-oz. \$0.60 8-oz. 1.25 188-2 188-8 8-oz.



G-C DIAL OIL REFRIGERATOR Made with graphite. AND APPLIANCE

Special for lubricating dials, drives, and fine mechanisms. Long lasting.

No. List 1245 4-oz. \$0.50



OIL Non-gumming oil for household appliances and small motors. The best general purpose

1250 \$0.50 4-02.



G-C SOLDERING **PASTE**

The best non-corrosive paste for radio and electrical work. Solders faster and smoother.

No. List 1207 2-oz. can \$0.30



G-C NON-STICK IRON TIP COMPOUND

soldering iron tips from burning into iron. Saves your iron and tips.

No. List 1201 2-oz. \$0.60





G-C NON-SLIP COMPOUND Powder Compound

For dial cords, belts, pulleys, etc. Good for V or flat belts on refrigerators, motors, etc.

No. List 1210 \$0.50



Liquid Compound

Penetrating, fast-dryrenerating, last-my-ing liquid, prevents slipping on dial cords, pulleys, belts. Increases life of cords and belts.

No. List 1211 1215 ½ -oz. \$0.30 2-oz. .60



CABINET REPAIR KITS - POLISHES











G-C FRENCH **EMULSION**

Best pad lubricant to use with French Varnish Polishing Method

164-4 4-oz. \$0.55

G.C. FRENCH VARNISH

Used by craftsmen to repair furniture and blend in the finish. Can be applied with pad, brush or spray. Dries fast.

ist
0.60
.75
.40

G-C WINDOW **CLEANER** CONCENTRATE

Mix with quart of water and make your own high-grade window cleaner. Makes glass sparkle.

No.		List
122-5	6-oz.	\$0.50

G-C SPOT **CLEANER**

Safe high-grade cleaner with special applicator in cap. Nonexplosive.

No.		List
124-2	6-oz.	\$0.60

G-C STRIP-X

Strips enamel from magnet wire. Dip wire in and wine insulation off-ready for soldering.

No.		List
26-2	2-oz.	\$0.60

G-C CONE RECONDITIONER

Apply to old dried out cones to restore plasticizer and bring back original tones.

No.		List
25-8	8-oz.	\$0.95
25.16	16-07	1 65



G-C FLOOR WAX

High - grade heavy duty commercial selfpolishing floor wax. Gives hard, durable finish.

List 163-16 16-oz. \$0.75

G-C RUBBING

OIL

Rub down newly fin-

ished or repaired cab-

inets to produce rich

satin sheen finish.



No. List 97-G 1 Gal \$6.55



G-C LEMON OIL POLISH

Inexpensive polish for removing dust, finger marks, treating dust rags, mops, etc. Picks up dust.

No.		List
91-8	8-oz.	\$0.45
91-16	16-oz.	.60



G-C SCRATCH REMOVER POLISHES DARK LIGHT

Polish contains stains to remove scratches. Sell to housewives,

No.	List
92-2 2-oz.	\$0.30
92-8 8-07.	.50
92-8-L 8-0%	Lab.
size	.50
92-16 16-oz.	.85



For light woods; polishes and removes scratches at same time. Popular with housewives

No.		List
93-2	2-oz.	\$0.30
93-8	8-oz.	.50
93-16	16-oz.	.85



G-C CREME-O-WAX POLISH

White non-staining bard wax base polish produces a hardglossy finish. Excellent for radios, pianos, refrig-erators, furniture, etc. 1 let

95-2	2-02.	\$0.30
95-8	8-oz. L	60
93-6-L	size	.60 .90
95-16	6-oz.	.90



G-C REFRIGERATOR PATCH KIT

"New Improved Kit"

Supplies everything necessary to repair porcelain or Duco nicks, dents, or scratches. Kit contains bottle of pure white lacquer enamel and bottles of Yellow, Blue, Brown, and Black tinting colors, solvent, spatula, porcelain patch stick, sandpaper, and brushes. Useful on refrigerators, washers, ranges, table tops, etc. Directions included.

No. 902

List \$4.35



G-C DELUXE CABINET REPAIR KIT

"New Improved Kit"

Comes in handy metal box. Contains ten shades of shellac sticks, bottles of light and dark oil stain, bottles of metal shading varnish, polish, General Skratch Stik, alcohol lamp (with alcohol), spatula, small brushes, steel wool, sandpaper, and wiping cloth. Everything necessary for a practical repair job. No special skill required. Directions included,

No. 901



G-C MASTER DELUXE CABINET REPAIR KIT

"New, Most Complete Kit"

A complete cabinet repair kit put in a permanent metal box. All finishes supplied are spirit soluble and will not cut or damage surrounding finishes on cabinets, etc. Kit contains 10 shellac sticks, alcohol lamp, French varnishes, rubbing felt and fluid, enamels, glue, steel wool, sandpaper, polish, directions, etc. Nothing else needed! The best buy on the market!

No. 900

List \$5.45

List \$9.95



G-C FRENCH

VARNISH KIT



G-C MAGIC SCRATCH KIT

Combination of 6 Kit for French polishing. Only way to shades fillers and light and dark scratch fluid. blend repairs with ad-Easy to use on emerjoining finish. Kit ingency jobs. cludes varnish, emulsion, pad, and instruc-

No. 915 List \$1.40



G-C MASTER CABINET TOUCH-UP KIT

"Ideal Quick Touch-Up Kit"

A complete, fast touch-up kit for repairing scratches and dents. Works on wood and plastic cabinets. The spirit finishes will not cut into the adjoining surface or injure surrounding finish. Contains French varnish, enulsion, colored enamels, stains, polishes, and filler. Sandpaper, steel wool, rubbing cloth and directions included. Brushes attached to caps of all finish bottles. Put up in metal box.

No. 907

List \$3.25



G-C RADIO-REFRIGERATOR CABINET PATCH KIT

"New Improved Kit"

A kit of the shellac patch sticks to fill all needs. Patches wood, plastics, bakelite and porcelain. Nine shellac sticks for the light and dark shades of wood, and black and white, alcohol lamp (with alcohol), spatula, steel wool, sandpaper and wiping cloth are packed in the metal box. Directions included.

No. 903

List \$3.85

No. 160-0 List \$1.40

tions.



GENERAL CEMENT GRILLE CLOTH—FLOCK KITS











G-C TOUCH-UP KIT

Practical for touching up small scratches and dents. Includes light and dark varnish and spirit stains. filler, cloth, brushes, etc.

No. 905 Kit \$1.10

G-C PLASTIC TOUCH-UP KIT

Kit commutouch - up Kit contains 6 colors touen - np enamels to fix up plastic and colored bloods. Walnut, Day lacquer cabinets. Walnut, Ivory, Black, Red. Blue. Green, and brushes.

List

G-C PORCELAIN PATCH STICK

Made for white porrefrigerators, sinks, ranges, fixtures, etc. Simply melt in-

Nο \$0.40 908 Stick

G-C SHELLAC STICK KIT

Handy assortment of 10 colors to take care of any shade of wood. Same as in G-C Kits.

925 Kit \$1.80

G-C SHELLAC STICKS

High grade sticks for filling dents and nicks in wood cabinets and furniture. Sticks 7" long.

	Lt. Walnut Dk. Walnut		No. 979 Dk. Oak 980 Transpa	rent .50
	Black	.50	981 Lt. Tran	
	White	.50	982 Walnut	
935	Maple	.50	983 Mahoga	ny .50
978	Lt. Oak	.50	984 Blonde	Maple .50



910











G-C FELT KOAT FLOCK KIT

New G-C kit with special blower gun. Distributes flock evenly and applies a thick velvet-like coat. Kit is complete with gun, brown and ivory flock, brown and ivory undercoat, thinner, brush, etc. Gives professional job on turntables, cabinets, grilles, tool boxes. toys, signs, etc. Has thousands of applications.

180-2 Kit

No.

180-7

180-5 2-oz. Can

180-6 ½-lb. Bag

1-lb. Bag

\$10.50

G-C FELT **KOAT KITS**

Complete flock kit with flock undercoat, thinner and brushes and shaker type can for applying flock. Colors: Brown, Blue. for applying and Colors: Brown, Blue, Taupe, Black, White, Red, Green, Ivory Red, Green, Silver and Gold. (Spec-ify Color).

No. No. 180-0 DeLuxe Kit \$3.00 180-1 Reg. Kit (No 2.15 thinner)

G-C FLOCK **BLOWER GUN**

It's easy to apply flock and be sure to get a good job with the G - C Patented Gun, Gun can also be used for dusting and cleaning.

No. 1 ist 180-3 Gun \$4.35 180-4-N Cleaning Nozzle for Gun .65

G-C FLOCK UNDERCOAT

Material is first applied on surface to be flocked. Then flock is applied. Used on metal, wood, paper, etc. Colors: Brown, tete. Colors: Blown,
Taupe, Blue, Black,
White, Ivory, Red.
Green, Silver and (Specify Col-Gold. or).

Nο 1 ist 4-oz. \$1.10 8-oz. 1.95 6-oz. 3.00 180.4 180-16 16-oz

G-C RUBBER BASE UNDER-COAT

Use as flock sizing on fabrics, upholstering, turntables, etc. Makes turntables, etc. pliable coating.

No. List 182-4 4-oz. \$1.00 182-8 8-0z. 1.75 182-16 16-oz. 2.50

FLOCK SIZING THINNER

For # 180 Undercoat 181-4 4-oz. \$0.4! 181-8 8-oz. 60 181-16 16-oz. 8! 4-oz. \$0.45 8-oz. .60 .60 .85 4.15 181-G 1 Gal



G-C FELT-KOAT FLOCK

Genuine Rayon Flock, 18" length fibers ac-

curately cut, give beautiful even finish. One

pound covers approximately 90 sq. ft. Colors:

Brown, Taupe. Blue. Black, White. Ivory.

Red, Green, Silver, and Gold. (Specify Color).



G-C GENERAL SCRATCH STICK

Removes scratches. Simply run over scratches and they will disappear. Handy to carry in your pocket or tool box for emergency repairs. Also sell to housewives,

Also sen No.

No.

909 Scratch Stik
909-D Display 12 Stiks
1-A SKRATCH STIK DEAL — WIRE DISPLAY
FOR DEALERS
Dealers and servicemen — Display the No. 1-A
Skratch Stik deal in your shop or store and
sell Skratch Stiks to your customers. Every
home and office needs one. You can earn extra
profit with this self-selling display.
No. 1-A Deal 12 Skratch Stiks Wire
List \$5.35
Dealer's Net 2.88*





G-C LUGGAGE FABRIC

Airplane type fabric for portables, test instruments. cabinets. Colors: Gray and Brown. (Specify Color).

Nο List 960 18" x 18" \$0.85 961 36" x 18" 1.65 962 Any length, 36" wide, per yard 3.05



Leatherette fabric to cover cabinets and instruments. Same as used by manufacturers. Colors: Black and Brown. (Specify Color).

No. 965 966 18" x 16" \$0.85 18" x 32" 1.65 Any length, per yard 3.05





List

3.00

5.00

\$1.00

G-C CABINET SPEAKER GRILLE CLOTH

Beautiful modern patterns of Brown, Gold and light colors to match Walnut, Mahogany and Ivory cabinets. Specify "Ivory" when ivory is wanted.

No.	Size	List	No.	Size	List
940	18" x 20"	\$1.25	954	5" x 10"	\$0.35
941	9" x 18"	.58	949-1	1-Yd. Pkgs.,	40.20
942	12" x 12"	.60		40" Wide	5.75
943	14" x 18"	.70	949-1R	40" Wide C	ont.
944	24" x 13"	.90		lgth., per vd.	4.95
945	18" x 13"	.70	949- 2 R	50" Wide C	ont.
946	8" x 8"	28		lgth., per vd.	
	9 ½" x 10"	.30	950	Roll 9" x 12	″ .50
948	6" 2 6"	25			

G-C SPARKLE GRILLE CLOTH

Juke box metallic grille cloth. Beautiful gold pattern. Sparkles in the light. Very good for ivory cabinets also.

1 ist 957 Large Pat-tern, per Yd, \$10.00 958 Small Pattern, per Yd.

10.00

G-C METAL FLOCKED **GRILLE SCREEN**

Very popular. Both sides flocked with rayon over galvanized metal screen. Used on radios, P.A. speakers, intercoms, auto radios, etc. Wa-

terproof,	durable, Colo	rs: brown, ivory.	Maroon
No.	Size	Color	List
95 1 -1	8" x 11"	Brown	\$0.85
951-3	8" x 11"	Ivory	.85
951-5	8" x 11"	Maroon	.85
952-1	18" x 24"	Brown	2.90
952-3	18" x 24"	Ivory	2.90
952-5	18" x 24"	Maroon	2.90
953-1	36" x 36"	Brown	8.95
953-3	36" x 36"	Ivory	8.95
953-5	36" x 36"	Maroon	8.95



GENERAL CORDS and CABLES















THE THREE MOST POPULAR CORDS USED

G-C No. 75 STANDARD THIN NYLON CORD

.028" diam. Most popular; used on 95% of sets. Braided nylon over fibre glass core. In plastic container.

No. Spool List 75-25 25 ft. \$1.25 75-50 50 ft. 2.40 75-100 100 ft. 4.50 75-11 Env. .40

G-C No. 75-A EXTRA THIN NYLON CORD

.025" diam. Used on RCA, GE. Strom.-Carl., etc. Braided nylon over fibre glass core. In plastic container.

No. Spool 75A-25 25 ft. \$1.25 75A-50 50 ft. 2.40 75A-100 100 ft. 4.50 75A-11 Env. .40

G-C No. 74 MEDIUM NYLON CORD

.040"diam. Very popular; used by RCA, Philco, GE, etc. Braided nylon over fibre glass core. In plastic container.

No. Spool List 74-25 74-50 25 ft. \$1.25 2.40 4.50 50 ft. 74-100 100 ft. Env .40

G-C No. 70 BRAIDED BRONZE CABLE

.040" diam.; used on radio dials, instruments and for aircraft reel-in antenna cable. Phosphor bronze braided over fibre glass core for strength. In plastic container.

No. Spool 70-25 25 ft. 70-50 50 ft. 70-100 100 ft. 25 ft. \$1.25 50 ft. 2.40 00 ft. 4.50 70-11

G-C No. 71 42-STRAND **BRONZE CABLE**

.040" diameter; 42 strands twisted phos-phor bronze over fibre glass core. Radio dials, aircraft reel-in anten-nas, etc. Durable and flexible. In plastic containers.

Nο Spool 71-25 71-50 25 ft. \$1.25 50 ft. 2.50 71-100 100 ft. 71-11 Env. 4.50 .40

G-C No. 73 HEAVY NYLON CORD

.062" diameter; used on Phileo, Majestic, Brunswick, etc. Very strong, chemically treated to prevent slipping. In plastic container.

No. Spool List 73-25 73-50 25 ft. \$1.50 50 ft. 2.75 50 ft. 73-100 100 ft. 5.00 73-11 Env. .40













G-C No. 76 SPECIAL THIN BRONZE CABLE

025" diam, braided bronze as used on GE, RCA, and others. Also for flexible con-nections on speakers, cones, etc. In plastic container.

Spool *List No. 25 ft. \$1.25 50 ft. 2.40 100 ft. 4.50 76-25 76-50 76-100 100 ft. Env.

G-C No. 73-X EXTRA HEAVY NYLON CORD

.072" diameter, Extra heavy cord as used by Philco and others. Chemically treated to prevent slipping. plastic container.

Spool List 73X-25 25 ft. \$1.50 73X-50 50 ft. 2.75 73X-100 100 ft. 5.00 73X-11 Env. .40

G-C No. 78 BRAIDED LINEN CORD

.040" diameter, same as used on Emerson radios, instruments, drawing boards, etc. Extra strong and durable. In plastic container.

No Spool List 78-25 25 ft. \$1.25 78-50 50 ft. 2.40 78-100 100 ft. 4.50 Env.

G-C No. 79 MONEL METAL CABLE

.035" diam. Strong and durable, non-cor-rosive cable for radio dials and instruments. Preferred by many to bronze cable. In plastic container.

Spool List 79-25 25 ft. \$1.25 79-50 50 ft. 2.40 79-100 100 ft. 4.50

G-C No. 80 EXTRA THIN METAL CABLE

.015" diameter, Very strong twisted steel cable, Popular on foreign and export re-ceivers, instruments, dials, etc. In plastic container.

No: Spool 80-25 25 ft. \$1.25 80-50 50 ft. 2.40 80-50 50 ft. 2.40 80-100 100 ft. 4.50

G-C No. 82 EXTRA THIN **PHOSPHOR BRONZE CABLE**

.012" diam, twisted of 7 strands .004" phosphor bronze. Used on dial instruments and Army and Navy Radar Equipment, In plastic container.

No. Spool List 82-25 25 ft. \$1.25 82-50 50 ft. 2.40 82-100 100 ft. 4.50



G-C PHOSPHOR

BRONZE

BELTING

quired to make repairs

on some of the older

For Atwater Kents — f_6'' wide x .005" thick.

61-25 25 ft. \$1.50

16" wide x .006" thick. 62-25 25 ft. \$2.00

For

Brunswicks -

This belting is

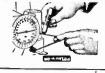


G-C NON-SLIP COMPOUNDS

Powder Compound For dials, cords, pulleys, belts. Prevents slipping.

1210 2-oz. \$0.50 Liquid

Penetrating liquid shrinks fibers, pre-vents slipping on dial cord and belts. fibers, 1215 2-oz.



G-C CORD DRESSING

Easy way to treat slipping cords. Simply rub on stick and job is done. Prevents and stops slipping.

No List 1212 Stick \$0.25



G-C READY MADE CABLES

For popular sets, Save time in repairing these sets. Model Brunswick,

15, 22 Front, \$0.50 Brunswick, R8 15, 22 Rear R9 GE, A88, A82, A87 R10 Majeric, 70,

71, 72

TOOL Handy tool to aid in

G-C DIAL CABLE

stringing new dial cord and replacing cables slipped off pulleys and drums. It's like an extra hand. Speeds up the job.

No List 5096 \$0.75



Very handy for every one. Picks up pieces in hard - to - get - at places. Will hold and start screws, nuts, etc. Will pay for itself in short time.

No. I ict 5089 \$1.50







.50





G-C DIAL CABLE RACK

Very handy, includes pop-ular cables. Hangs on wall or on bench. Handy measuring rule or sign. Kit includes rack and five 25 ft. spools each Nos. 71, 73, 74, 75 and 76

No. List 7-A-25 \$6.50

G-C DIAL SPRING KITS

Handy kit of springs as used on dial cord drives. Six sizes included.

1054-E 10 Assorted \$0.40 1054-SE 10 Small Springs
Kit 25 Asst.
Springs
Kit 100 Asst. .40 1055 1,20 1056 4.40

G-C No. 77-SK DIAL CORD KIT

Contains four 25 ft, spools most popular cord; 75-25, 74-25, 76-25, 71-25, and free assortment of dial cord clamps and evelets.

No. List 77-SK Cable Kit \$4.75

G-C No. 78-SK DIAL CORD KIT

Combination kit in 10 ft. lengths of all G-C Dial Cables. Each in separate envelope, packed in leatherette box. Handy for servicemen and experimenters.

78-SK Cable Kit \$4.65



G-C DIAL CORD CLIPS

Handy clip and eyelet assortment used to fasten to ends of dial cords, etc. Required on every set.

No. 1028-E Assortment \$0.40



DIAL BELTS RUBBER DRIVES --- CRYSTALS





General Cement Belts are approved replacements for all sets. They are made of best quality material and will not stretch. They are specially treated to prevent slipping. They are the best. Sizes available for all sets. They are easy to install as they are made to fit. No adjustments necessary.

BELTS — 25c List Each

G-C SERVICEMEN'S KITS

Servicemen! Have an assortment of belts on hand for prompt replacement. Kits contain only the more popular belts used. KIT INCUUDES ATTRACTIVE STEEL BOX—BELT SCALE AND COMPLETE LISTING OF OVER 1100 MODELS.

List Price No. G- 25—Kit of 25 popular belts \$ 7.50 No. G- 50—Kit of 50 popular belts 14.75 No. G-100—Kit of 100 (includes every size) 25.00

INSTRUCTIONS - FOR MEASURING BELTS

To determine size of belt, if the old belt is available, cut the belt and measure for stretched out length. This will be "cut length" of belt. If old belt is not available or is worn out so that it cannot be properly measured, stretch a thin thread around belt pulleys on set. (Be sure to use thin thread as a thick cord will give an inaccurate reading.) Measure the thread, it will be our "circumference around pulleys." In measuring belts always remember that the circumference around pulleys is not the same as stretched out or cut length. A belt when cut, develops approximately 3/16" extra length when stretched out, depending on thickness of belt.

G-C RADIO BELT SPECIFICATIONS

LISTED AS PER BELT NO.				LISTED AS PER BELT SIZE							
G C Belt	Circumference Around Pulleys	Cut Length	GC Belt No.	Circumference Around Pulleys	Cut Length	Circumference Around Pulleys	Cut Length	GC Belt No.	Circumference Around Pulleys	Cut Length	G C Bett No.
				14-33/64",	14-3/4"	6-23/32"	6-29/32"		11"	.11-3/16"	135
02	6-23/32" 6-57/64"	7-5/64"	149		15-13/64"	6-55/64"	7-3/64"	161	11-5/64"	.11-17/64"	
03	7-15/32"	7-21/32"	150		16-9/64"	6-57/64"	7-5/61"		11-9/64"	.11-21/64"	
	8-1/64"	8-13/64"	151	14-57/64"	15-5/64"	6-15/16"		158	11-3/16"	11-13/8"	
05	7-1/2"	7-11/16"		10-1/2"	10-11/16"	7-1/64"	7-7/16"		11-9/29"v5/16'	11-15/32"x5/16"	1311
		7-7/16"	153	8-39/64"	8-51/64"	7-1/4"	7-15/32"		11-3/8"	11-9/16"	
07	7-11/16"	7-7/8"	154	12-1/32"	7-23/32"	7-13/32"	7-19/32"		11-95 /64"	11-37/64"	136
	8-21/32" 8-1/2"	8-27/32" 8-11/16"		7-9/32"	7-15/32"	7-15/32"	7-21/32"	103	11-7/16" 11-21/32"	.11-5/8"	173
)9 0	8-1/2" 8-25/64"	8-37/64"	157	7-1/64"	7-13/64"	7-1/2"	7-11/16"		11-21/32"	.11-27/32"	194
ı	7-15/16"	8.1/8"	158	6-15/16"	7-1/8"	7-35/64"	7-23/32"		11-3/4"	.11-15/16"	141
	8-43/64"	8-55/64"		8-1/32"	8-4/32"	7-11/16"			11-13/16"	.12"	143
3	8-3/32"	8-9/32"	160	8-11/16"	8-7/8"	7-3/4"	7-15/16"		12"	.12-3/16"	
4	8-15/64"	8-27/64"		6-55/61"	7-3/64"	7-15/16"		111	12-1/32"	.12 1/4"	112
5	9-13/64"	9-25/64"		8-13/64"	8-25/64"	8-1/61" 8-1/32"			12-7/32"	.12-13/32"	140
	9-5/16"	9-1/2"			9-31/64"	8-1/32"			straight helt	.12-7/16"-str. belt	193
17	9-1/16"	9-1/4"	164	10-1/4"	10-7/16"	8-3/16"		172	19-0/29"	19-15/39"	139
	10-23/64"	10-35/64"	165 166	17-1/16"	19-5/8"	8-13/64"	8-25 / 64"		19-15/32"	19-21/39"	
9	9-17/32"	9-23/32"	107	0 19 /16"	0"	8-15/64"	8-27/64"	114	19-1 9"	.12-11/16"	178
20	10-45/64"	10 ~ 7 / 64	168	19-13/16"	13"	8-25/64"	8-37 /64"		12-39/64"	.12-51/64"	145
1	10-3/8"	10-9/16"	169	17-13/32"	17-19/32"	8-1/2"	8-11/16"	109	12-13/16"	.13"	168
22 23	9-7/8"	10-1/16"	170		16-31/64"	8-39/64"	8-51/61"		13-3/16"	.13-3/8"	
24	10-17/64"	10-29/64"	171		11-0/0	8-21/32"	8-27/32"	108	14-7/32"	.14-13/32"	186
25	10-25/64"	10-37/64"	172	8-3/16"	8-3/8"	8-43/61"		112	14-7/52 14-27/64" 14-33/64" 14-57/64"	.14-39/64"	
26	10-1/16"	10-1/4"	173	11-7/16"	11-5/8"	8-11/16"			14-33/04	.15-5/64"	
27	9-59/64"	10-7/64"	174	7-3/4"	7-15/16"	8-13/16" 9-1/16"					149
28	10-19/64"	10-31/64"	175	21-5/16"	21-1/2"	9-13/64"		115	15-17 /64"	15-99/64"	187
29	10-41/64"	10-53/64"	176		7 10 /99"	9-19/64"	9-31 /64"	163	15-7/16" 15-13/16"	.15-5/8"	183
30	11-5/64"	11-17/64"	177	12-1/2"	12-11/16"	9-5/16"			15-13/16"	.16"	182
	11-9/61"	11-21/61" 11-15/32"	179	17-37/64"	17-49/64"	9-17/32"	9-23/32"	119	straight belt	.16" - str. belt	192
31 V	v11-9/32" 10-31/32"	11-5/32"	180	10-27/32"	11-1/32"	9-7/8"	10-1/16"	123	15-61/64"	.16-9/64"	
32 33	10-61/64"	11-9/61"	181		18-3/4"	9-59/64"	10-7/64"		16-19/64"	.16-31/64"	170
34	11-3/8"	11-9/16"	182		16"	10-1/16"	10-1/4"		16-27/64"	.16-39/64"	
₹5		11-3/16"	183	15-7/16"	15-5/8"	10-1/4"	10-7/16"	164	16-15/16"	.17-1/8"	165
36	11-25/64"	11-37/64"	184	16-27/64"	16-39/64"	10-17/64"	10-29/64" 10-31/64"	129	17-1/16"	17-19/39"	
37	11-5/20#	11-15/32"	185	16-15/16"	17-1/8"	10-19/64	10-35/64"	118	17-1/16" 17-13/32" 17-37/64"	17-49 /64"	
38	12"	12-3/16"	186	14-7/32"	14.13/32"	10-23/01	10-9/16"	122	17-5/8"	.17-13/16"	190
39	12-9/32"	12-15/32"	187	19-47/64"	19-59/64"	10-25/64"	10-37/64"	125	18-1/9"	.18-11/16"	189
40	12-7/32"	12-13/32" 11-15/16"	189	18-1/2"	18-11/16"	10-1/9"	10-11/16"	. 152	19 0 /16"	18-3/1"	
41	12 0 10011	10 1 / 177	190	17-5/8"	17-13/16"	10-41/64"	.10-53/64"	. 129	19-7/16"	.19-5/8"	166
42	11-12/16"	12-1/4	191	22-49/64"	22-61/61"	10-11/16"	10-7/8"	. 121	19-7/16" 19-47/64"	19-59/64"	
43 44	11 13/16" 12-15 32" 12-39/64"	12-21/32"	192	straight belt .	16"	10-45/61"	.10-57/64"	. 120			175
45	12-13 52	12-51/61"	193	straight belt .	12-7/16"	10-27/32"	11-1/32"	. 180	22-35/64"	.22-47 / 64"	170
46	13-1 2"	13-11 16"	194	11-21/32"	11-27/32"	10-61/64"	11-9/64"	133		.22-61/64"	191
47	13-1-2" 14-27/64"	14-39/64"	1			10-31/32"	D1				
		Ru	v a	G-C Belt Kit o	and Get a	Free Belt	Replaceme	пт С	ouide .		

	G-C	RADIC	AND	PHONO DRIVES	
	. 1	l	No.	List	- 1
1 1		- 1	12	Emerson, Majestic \$0.10	
St. St.			13	Small AK .10) [
			15	Phileo .25	- 1
			16	General Industries,	
No.		List		RX-LX .25	1
1024-SE	Env. Asst. 5 Small	\$0.40	17	Alliance 80, Admiral.	- 1
	Env. Asst. 5 Large	.40		Phileo, VM, Gen. Ind.,	. 1
1024-E	Env. Asst. 10 Dial	.80	7.0	Seeburg, etc25	
	Box 25 Asst. Drive	s 1.50	18		
	Box 100 Asst.	6.00	19 20-E	Phileo. RCA, etc15 Detrola. Rubber Type .40	
	AK Small	.10			
2	AK Large	.10	20-1-E	Spring for Detrola .50 General Electric .15	
3	Stewart-Warner	.10	21-A 22	RCA RP-176. GE	'
4	Kennedy, Wells-G.	.10	22	809-J, large tire 1.00	1
5	Stewart-Warner RCA	.10	23	RCA RP-176, GE	
7	Stewart-Warner	.10	22	809-J, rim drive .20)
é e	Stewart-Warner	.10	24-E	Crescent 3 % " O.D40)
2 3 4 5 6 7 8 9	Atwater-Kent	.10	24-AE	Admiral, Crescent	
ío	Stewart-Warner			3 ¼ " O.D40	
îĭ	Lge. Atwater-Kent		24B-E	Admiral 3 1/8" O.D40)

G-C PLASTIC CRYSTAL

Clear plastic crystal in flat sheet. For radio dials, clocks, dashboards, etc. Can be cut to size, fitted and cemented in place.

No. 92 8" x 10"

List \$1.45

List \$1.45

G-C RADIO DIAL GLASS AND CLOCK CRYSTALS

Round convex replacement glass crystals for radios, clocks, auto radios, instruments, panels, dash board.

V	1		No.	Diam.	List	No.	Diam.	List
No.	Diam.	List	45	4 3/8 "	\$0.65	64	6 3/4 "	\$0.65
25	1 34 "	\$0.55	46	4 1/2 "	.65	66	7"	.75 .75
26	1 1/8 "	.55	47	4 5/8 "	.65	67 68	7 ½ " 7 ¼ "	.75
26A	2"	.55	48 49	4 ¾ ″ 4 ¾ ″	.65 .65	69	7 3% "	.75
27 28	2 1/8 "	.55	50	5"	.65	70	7 1/6"	.75
29	9 3/2 "	.55 .55 .55	51	5 1/8"	.65	71	7 ½" 7 ½"	.75
30	2 1/4 " 2 3/8 " 2 1/2 "	.55	52	5 1/4 "	.65	72	7 3/4 "	.75
31	2 5% " 2 34 " 2 7% "	.55	53	5 3/8 "	.65	73	7 1/8 "	.75
32	·2 ¾ "	.55	54 55	5 ½" 5 %"	.65 .65	74	8"	.75
33	2 1/8 "	.55	56	5 3/4 "	.65	75 76	81/8"	.85
34 35	3" 3 ½"	.55	57	5 1/8"	.65	77	8 ¼ ″ 8 ¾ ″	.85 .85
36	3 1/4 "	.55	58	6"	.65	78	8 1/2 "	.85
37	3 3/3 "	.55	59	6 1/8 "	.65	79	8 3/8" 8 1/2" 8 5/8"	.85
38	3 1/2 "	.55	60	6 1/4 "	.65	80	8 3/4 "	.85
39	3 5/3 "	.55	61 62	6 3/8 "	.65 .65	81 82	8 7/8 " 9"	.85 .85
40 41	3 % "	.55 .55	62A	6 5% "	.65	83	9 1/8"	.85
42	4"	.65	63	6 7/8 "	.65	84	9 1/4 "	.85
43	4 1/8"	.65	DC65	Kit of	65 Crys		- /#	\$38.50
44	4 1/4 "	.65	DC25	Kit of	25 Pop	ular Cr	ystals	13.75



GENERAL CEMENT RADIO KNOBS - KITS











Knurl shaft or set serew types, 1 1/8".

Knurl Shaft Type

Set Screw Type

Walnut



MAJESTIC BAKELITE KNOBS Popular pattern. Set

screwtype. 78"diam., ¼" shaft.

No. List 1100 Walnut \$0.16 1100-l Ivory .20

POYAL **BAKELITE KNOBS** Beautiful pattern. Set

screw type. 78" diam., 1/4" shaft. No.

1105 Walnut \$0.16 1105-I Ivory

BAKELITE KNOBS

Set screw type. 34" and 1" diam., 14" shaft. List No. List 1109 % "Wln. \$0.16 1110 1" Walnut .16 1109-1 % "Ivory .20 1110-1 1" Ivory .20

MODERN

LARGE KNOB

Knurl shaft or set screw types. 1 1/8"

Knurl Shaft Type

76 Walnut \$0.12 Set Screw Type

Walnut

diameter.

No.

1176

1177

NEW LARGE KNOR

diameter.

LARGE KNOB Knurl shaft or types. screw diameter. List

POPULAR

Knurl Shaft Type 180 Walnut \$0.12 Set Screw Type Walnut













MIDGET BAKELITE KNOBS

For small sets. 16 shaft. List diam., 1/4

For small sets. diam., set screw 1/4". No. Walnut \$0.12

STREAMLINE POINTERS ne most popular pointer knob. ¼" shaft, set screw type 1¼" long.

1136 Black \$0.15 1136-W Walnut .16 1137 Red .18 1136 1137 Ivory

A very popular point-er knob. 1/4" shaft, set screw type, 2" long.

Nο. 1135 Black \$0.20 1135-W Walnut .24 Red Ivory 1138 24 1138-1

Walnut \$0.12

Brass Bushing For intercomms and instruments. Black. Set screw, ¼" shaft, 2¾" long.

No. 1130 Black 3 1130-W Walnut Black \$0.38 .38

MODERN POINTER BAR KNOBS

Set Screw Type

No. Pointer Type 1115 Walnut \$0.12 1116 lvory .13

Red

Black

1118

Non-Pointer Type
1111 Walnut \$0.1
1112 Ivory .1
1113 Red .1



For intercomms and instruments. Black finish. Set screw, ¼" shaft, 1 5%" long.

No. 1131 Black \$0.35 1131-W Walnut













INSTRUMENT KNOB

A heavy duty knob for communication equipment, instruments. 4" brass insert, set screw. 1 34" O.D. x %".

No. 1 ist 1175 Black \$0.35

STREAMLINE POINTERS Brass Bushing

Brass insert. shaft, set screw. 1 1/4" long. No. 1170 1170 Black \$0.25 1170-W Walnut .25 Red

Brass insert. 14" shaft, set screw. 2" Brass long. 1171 1171-W Black \$0.30 Walnut .30 1173 Red

POPULAR BAR KNOB

For intercomms, struments, appliances. Bakelite with set screw. 4" hole, 1 %"

No. 1132 Walnut \$0.20

POPULAR

PLASTIC KNOB 報" diameter with ½" shank extension knurled shaft.

1153 Walnut \$0.12 .13 Ivory

PLASTIC KNOB

diameter, flush type for 1/4" knurled shafts.

Nn. 1155 Walnut \$0.12 1156 Ivory .13



MIDGET TYPE PLASTIC KNOB

34" diam, flush type for 14" knurled shafts. No 1159 Walnut \$0.12 1160 Ivory



ACORN

PLASTIC KNOB %" diam., 1%" shank for 14" knurled shafts. Walnut \$0.12 1183 Ivory

PUSH-ON

KNURL KNOB

18" diam. flush type
for ¼" knurled shafts.
No. List
1184 Walnut \$0.12 Walnut \$0.12 1185 Ivory



PUSH-ON

KNURL KNOB

†§" diam., ½" shank
for ¼"knurled shafts.
No. List 1186 1187 Walnut \$0.12 Ivory .13



POINTER TYPE

PLASTIC KNOB 18" diam., 1/2" shank for 1/4" knurled shafts, No. 1188 1189 Walnut \$0.12 Ivory



Walnut \$0.12

List











Ivory

No. 1157

1158

MIDGET TYPE PLASTIC KNOBS 32" diam., 1/2" shank for 1/4" knurled shafts. Walnut \$0.12

diam., flush shank for ¼"knurled shafts. No. List 1193 1194 Walnut \$0.12

SPRING AND D-SHAFT KNOBS

Spring type. \\ dian Fits \\ " flat shafts. diam. D- or 5% " c No. flat shaft type. diam. Walnut \$0.12 1161 1162 Walnut \$0.12 SPRING



D- or flat shaft type. ¾″ No. diam. List 1163 1164 Walnut \$0.13 Ivory

AND D-SHAFT KNOBS D- or flat shaft type. 1" diam.

Nο

1166





Ivory

No

Ivory



in assorted kits, all kinds of knobs included.



G-C AUTO RADIO KNOBS

| * diam. x | * high. | Set screw to radio knob. | For ¼ and % shafts. | Brass bushing with | x % "high. F set screw. 1/4" Shaft 1191 Pearl Gray \$0.30 1192 Maroon .30 A" Shaft 1167 Pearl Gray .30

1168 Maroon

Set screw type auto radio knob. 13" diam. x % "high. For either 14" or 18" shafts with bushing.

1195 Pearl Gray\$0.30 1196 Maroon .30

G-C AUTO

RADIO KNOBS Chrome plated. For 1/4" and 3" shafts.

Set screw mounting. No. 1169 1/4" 16" \$0.30 1174 .30

G-C KNOB SET SCREW ASST.

Handy set screw assortments for radio knobs. shafts, pulleys. 6-32, 8-32, and 10-32.

Nο. 1060 50 Asst.\$1.10 1061 100 Asst. 2.00 1062-E 20 Asst. 6605 30 Asst.

G-C RADIO KNOB KITS Popular plastic knobs

Quantity



Walnut \$0.14

1140 35 Asstd. Push-on Buttons 1141 28 Asstd. Spring Knobs 1142 24 Asstd. Set Screw Knobs 1143 30 Asstd. All Type Knobs 1144 15 Asstd. Auto Radio Knobs, for 1/4" and 1/6" shafts G-C RADIO KNOB PULLER

\$0.40

Very handy in moving knobs that are hard to pull off. Simply slip behind knob and pull off. Saves the cabinet and the knobs.

No.



G-C KNOB SPRING KITS Twelve types of knob springs or wedges in kit. No. 1049-E Env. 20 Asstd. 1050 Kit 35 1051 Kit 100 List \$0.40 Kit 35 Kit 100 Jar 35 Asstd. .85



G-C KNOB FELTS Used behind knobs. Saves cabinet.

1065-E Env. 50 \$0.40

Jar 70

Reduce from 1/4" 10". For auto radios. 6751 \$0.40 1063

G-C KNOB BUSHINGS



.65

\$3.95 3.95 3.95

3.95

3.95



CEMENT PHONO NEEDLES and ACCESSORIES













G-C MASTER POINT PHONO NEEDLES

G-C CATHEDRAL TONE

Long life, excellent tone needle made with osmium alloy tip to insure uniform reproduction and long life Will save the records and give excellent reproduction for a long time.

No. 1430 Each \$0.75 1431-D Display 12 # 1430, 9.00

G-C SYMPHONIC NEEDLE

Superior quality long life needle designed to give excellent tone. Special osmium alloy tip gives true reproduction with less pressure on the records. Will last indefinitely.

No. List 1435 Each \$1.00 1435-D Display 12 # 1435 12.00

G-C CONCERT GRAND Very finest "long life" curved "spring ac-tion" needle that will bring out the finest tones in music. Special osmium alloy tip insures long life. Tip is perfectly formed to fit record grooves. The best.

No. 1436 Each \$1.50 1436-D Display 12 # 1436 18.00

G-C RECORD-LIFE LUBRICANT

Simply wipe record with "Record-Life" and the needle will glide over the record smoothly. Prevents record and needle wear; also eliminates noises and scratching sounds. Use also for making records.

No.		List
125-1	1oz.	\$0.30
125-2	2-oz.	.60
125-4	4 -oz.	.85
125-6	6-02.	1.00

G-C REK-O-DOPE

Required lubricant when recording and cutting records, All purpose, it cools. cleans, lubricates, and hardens grooves when cut. Rek-O-Dope will give better tone and longer life.

- 1			
-	No.		List
)	126-1	1.oz.	\$0.30
5	126-2	2-oz.	.60
5	126-4	4-0%.	.85
)	126-6	6-02.	1.00

G-C CORD CONNECTOR

Handy cord connector to connect phono motors to radio sets, for appliances, vacuum cleaners, sewing machines, etc.

No.	List
868	\$0.65













G-C 'JUKE SPECIAL PHONO NEEDLE

Long life needle. Preferred by operators on coin machines, automatic records, etc. Precious osmium tip will give long, hard service and tone quality, even when used with heavy pick-ups. Will give thousands of plays.

No. 1437 Each \$1.00 12.00

G-C RECORDING STYLUS

The best cutting stylus made from alloy steel will give several hours of good cutting, Make your own recordings.

List No. 1433 Each \$0.50 1434-D Display 12 # 1433. 6.00

G-C SERVICEMAN'S NEEDLE PACKET

Handy package containing ten assorted high quality G-C Mas-ter - Point Needles. Packaged in attractive folder which protects the needle packages so that they are fresh and new when you make your sale.

1432 Packet \$9.50

G-C RECORD TURNTABLE FELT

Re-cover phono turn-tables with ready cut felts. Dark brown.

	D	
No.	Dia.	List
1292	7 1/8 "	\$0.45
1296	8 % "	.60
1293	9 1/8"	.65
1294	11 %"	.75
1295	15 %"	1.30
Bro	wn Felt	
Ву	The Y	ard
1298	36" W	
	per yd.	5.50

G-C DETROLA SPRING DRIVE

Genuine replacement for Detrola turntables. Spring drive with core inside. Used on Detrola, Utah, and Trela models, etc.

No. List 20-1-E Detrola Spring \$0.50



Special V and Rim drives for RCA, RP-176 and G.E, 809-J turntables.

No. List 22 Large Tire, \$1.00 each 23-E Env. 2 Rim Drives 40



G-C PHONO NEEDLE STYLUS **SCREWS**

Here's the hard-to-get replacement thumb set screws for pick-up arms and recording heads!

No.	List
1052 15 Asst. Stylus Screws	\$ 1.65
1052-E Env. 7 Asst. Screws	.40
1053 100 Asst. Stylus Screws	11.00

Individual Phono Screw Specifications

	•	
P1	For Shure Brothers, etc.	.10
P2	For Astatic, RCA, Seeburg,	
. –	Webster, etc.	.10
P3	For Astatic, Stromberg-Carlson,	
	Universal, Webster, etc.	.10
P4	For Rek-O-Cut, Webster, etc.	,15
P5	For RCA, etc.	.15
P6	For RCA, etc.	.10
P7	For Webster, etc.	.15
P8	For Shure Brothers, etc.	.15
P9	For RCA. Astatic, Webster, etc.	.15
P10	For Audex, etc.	.15

CARTRIDGE MOUNTING SCREWS

For mounting cartridges in Phono Pick-Up

No.						List
6005-E	Env.	60	4-36	Х	1/4 "	\$0.40
6005-AE	Env.	60	4-40	X	1/4"	.40

U-90



G-C STA-PUT PHONO-GEAR LUBRICANT

New "STA-PUT" lubricant for phono motors, gears, shafts, etc. Will not run or drip—it "Stays Put." Recommended by RCA, G-E, and others

No. 1223 Tube \$0.60 122.2 2-oz



G-C PHONO NEEDLE AND PARTS CUP

Standard size bakelite cup for phono needles cup for phono needles and parts. It makes handy holder for screws, nuts, parts, etc., on the service bench.

No. 1399 Needle Cup \$0.10



G-C SHIELDED PHONO PICK-UP WIRE

Handy package of sin gle conductor shielded wire as used on phono pick-ups, etc. Enough wire for several jobs in package.

No. 1738-E Envelope \$0.40



G-C RECORD CLEANING PAD

Specially treated soft felt pad for cleaning and removing dust from records. Saves records.

No. 4" x 4" \$0.25 1290 1291 6" x 6"



G-C PICK-UP & CARTRIDGE SCREW ASST.

Contains small size screws and bushings such as used on cartridges of pick-up arms. Very handy in replacing cartridges or repairing stripped threads.

No. 6000-E 30 Screws, \$0.40 List



G-C **PHONO TURNTABLE DRIVES** RUBBER REPLACEMENT DRIVES

Exact duplicates for replacement of popular friction type phono turn-table drives. Use G-C # 35-2 Rub-ber-to-Metal Cement for cementing



.40

	runner to rim.	
No.	List	1
16	For General Industries	
16-E 17	RX-LX Motors \$0.25 Env. 2 No. 16 Drives .40 For Alliance Model	
17-E	and Motorola .25 Env. 2 No. 17 Drives .40 For RCA .15	1
18-E	Env. 3 No. 18 Drives .40)
19 19-E	For Phileo, RCA, etc15 Env. 4 No. 19 Drives .40	
20-E	Detrola Rubber Drive .40	
20-1-E	Detrola Spring Drive .50)

List Nο. 21-A For General Electric Models 21-A-E Env. 2 No. 21-A 22 RCA RP-176, G-E \$0.15 809-J, large tire RCA RP-176, G-E 809-J, rim drive Env. 2 No. 23 Drives Crescent 3 ¾ " O.D. 1.00 23 .20 .40 24-E Crescent 3 % O.D. 3 ¼ " O.D. 5 Admiral 3 ½ " O.D. 5 Admiral 3 ½ " O.D.

24-B-E Admiral 3 1/4" O.D.



CEMENT SWITCHES - SPAGHETTI TUBING













G-C TOGGLE **SWITCH**

S.P.S.T. Radio and appliance switch. Open housing, underwritersapproved. Made by Cutler-Hammer, 3 amp. 125 volt. Nickel Plated.

No. List 1339 S.P.S.T. \$0.45

G-C PUSH-ON PUSH-OFF SWITCH

For vacuum cleaners, appliances, test equipment. Made by H & H for G-C. Rated at 3 amps., 125 volts. Nickel Plated.

List 1338 S.P.S.T. \$1.45

G-C BAT HANDLE SWITCH WITH WIRE LEADS

For vacuum cleaners. appliances, radio sets, etc. Made by H & H for G-C. Rated at 3 amps., 125 volts. Nickel Plated

No. 1335 S.P.S.T. \$0.95

G-C ON-OFF PLATE

Will fit the G-C, H & H, Cutler - Hammer, and other makes of standard switches.

Nο List 1329 On-Off Plate \$0.05

G-C BAT HANDLE TOGGLE **SWITCH**

Tear drop handle general purpose switch. Made by H & H for G-C. 3 amps., 125 volts. Nickel Plated.

1330 S.P.S.T. \$0.60 1331 S.P.D.T. 1332 D.P.S.T. .75 1.20 1333 D.P.D.T.

G-C TOGGLE **SWITCHES**

Ball handle general purpose switch. Made by H & H for G-C. 3 amps., 125 volts. Nickel Plated.

No. List 1300 S.P.S.T.* \$0.60 1300 S.P.S.T.* \$0.60 1301 S.P.S.T.† .70 1302 S.P.D.T.* .80 1303 S.P.D.T.† .85 1304 D.P.S.T.* 1.25 1305 D.P.S.T.† 1.25 1306 D.P.D.T.* 1.30 1307 D.P.D.T.† 1.40 * ½" Shank Length. † %" Shank Length.













G-C PUSH BUT-TON SWITCH

Two circuit, "slov make and quick break" momentary contact switch. One circuit normally on, other normally on, other off; pushing button reverses circuits in use. Made by H & H for G-C. 3 amps., 125 volts. Shank %" long. No. 1340 Switch List

NO. 1340 Switch \$1.20 PUSH BUTTON For 1340 Switch RedorBlack (Specify) 1343 Button \$0.35

G-C ROTARY **SWITCHES**

Best grade enclosed rotary switches. Made by H & H for G-C. 3 amps., 125 volts. Shafts 1½" long.

Shatts 1 72 No. List 1320 S.P.S.T. * \$0.85 1321 S.P.S.T.† 1.00 1322 S.P.D.T.* .95 1323 S.P.D.T.† 1.15 1324 D.P.S.T.† 1.45 1325 D.P.D.T.* 1.45 1325 D.P.D.T.* 1.45 1326 D.P.D.T.† 1.70 %" Shank Length. I" Shank Length.

G-C NEUTRAL CENTER SWITCH

Handy radio, appliance and tester switch with 3 positions, On-Off-On, Rated 15 amps., 110 volts; 15" shank. Nickel Plated.

List 1308 S.P.D.T. \$1.25 1309 D.P.D.T. 2.00

G-C EXTRA HEAVY DUTY **POWER SWITCH** Three position for mo-

tors, projectors, trans-mitters, movie equipment, etc. Made by H & H for G-C. 10 amps., 125 volts. Neu-tral off in center. Size 2" x 1" x 1 %", shank 3," diameter.

List No. 1352 D.P.D.T. \$5.50 1353 3.P.D.T. 8.25 1354 4.P.D.T. 12.00

G-C HEAVY DUTY POWER SWITCH

Push button, D.P.S.T. safetyswitch for transformers, racks, transmitters, refrigerators and high frequency work Made by H & H for G-C. 12 amps., 125 volts. Nickel Plated

List 1351 D.P.S.T. \$2.20



G-C HEAVY DUTY POWER SWITCH

D.P.S.T. toggle power switch for motors, appliances, projectors, etc. Made by H & H for G-C. 12 amps., 125 volts. Nickel Plated.

No. List 1350 D.P.S.T. \$1.55







TUBING KITS Handy kits of assort-ed colors and sizes. Ideal for experimenters and servicemen.

Kit of 25 No. 635 ft. Asstd. \$0.90 635-D Display 8 No. 635 7.20 636 Kit of 15 ft. Asst. 1.25 636-DDisplay 8 No. 686 10.00

G-C PLASTIC

G-C ASSORTED

An assortment of 7 1/2" An assortment of 7 ½.

lengths of spaghetti
sleeving, 26 lengths
to the kit, Sizes include from No. 17.

wire to ¾" I.D. A

very handy bundle to
have for repair jobs.

550 Kit 26





G-C SLIDE **SWITCHES**

For phonographs, tone controls, auto lights, electric trains, etc. 1/2" wide x 1 1/8" center mounting.

1355 S.P.S.T. \$0.35 1357 S.P.D.T. 1358 D.P.S.T .45 1359 D.P.D.T. .50

G-C RADIO FRICTION TAPE

This narrow 3/8" tape was particularly made for radio work. eliminates waste and saves time and is tearing of tape. handy to carry with you.

No. List Rol! 870 65 ft. 3/4" \$0.55 871 65 ft. 3/4" .95

SPAGHETTI KIT

No. List Lengths \$0.65

G-C SPAGHETT! **ASSORTMENT**

"A Box Full of Spaghetti"

Here's a buy you can't beat on a spaghetti assortment. A variety of sizes and colors are included of high grade varnish tubing. Put varnish tubing. Put up in attractive box.

No. List 551 \$1.25

G-C SPAGHETTI

ON SPOOLS
"Approved by
ASTM"
5000-Volt Dielectric

Strength
Best grade varnished tubing put on convenient 20-ft. spools, Will fit wire from No. 12 to No. 18. Colors: Black, Red, Yellow, Green, Blue. Specify color.

No. 499 Spoot 20-ft. \$1.95

G-C COATED SLEEVING





Best grade varnished sleeving. Dielectric strength 2000 volts. Colors: Black, Red, Yel-

low,	Green, Brown. Specify color.	
No.	Size	List
525	No. 20, fit 20 wire	\$0.11
528	No. 17, fit 18 wire	.12
531	No. 14, fit 14 wire	.15
533	No. 12, fit 12 wire	.15
537	⅓″ I.D.	.20
540	18 " I.D.	.30
543	1/4 " I.D.	.35
546	3/8" I.D. (resist. size)	.60
547	7 " I.D.	75

G-C GENFLEX PLASTIC TUBING

High grade extremely flexible plastic tubing for Ra dio and Electronic Insulation work. Resistant to cold or heat. High dielectric

strength, average 8,000 volts. Put up in attractive individual boxes for easy handling. Colors: Black, Red, Green, Clear (Specify)

		Std.	
No. \		Pkg.	List
603		20 ft	t. \$0.95
605	16	20 ft	95
607	14	20 ft	95
609	12	20 ft	t95
611	10	15 ft	95
613	-8	15 ft	95

No. Wire Pkg. List 616 6 10 ft. \$0.95 617 4 10 ft. .95 620 2 10 ft. .95 625 Fits over 300-620 2 10 16. 625 Fits over 300-olim Twin Line 2 # .95

All sizes available in continuous lengths on special order of 1,000 feet or more.

G-C RADIO SPAGHETTI



Best grade Radio and Television spaghetti. Smooth coated, with best varnishes. Very flexible, 5000 volt dielectric, Approved by ASTM. Colors: Black, Red, Yellow, Green, Brown,

Speci	fy color. 30" lengths.	
No.	Size	List
500	No. 20, fit 20 wire	\$0.18
503	No. 17, fit 18 wire	.18
506	No. 14, fit 14 wire	.20
508	No. 12, fit 12 wire	.20
512	⅓ ″ I.D.	.35
515	3 " I.D.	.50
518	¾ " I.D.	.60
521	%" I.D. (resist, size)	.75
522	7 " I.D.	.95
523	1/4" I.D.	1.20



CEMENT RADIO SOCKETS — PLUGS — JACKS









G-C STANDARD TUBE SOCKETS

BAKELITE SOCKETS

High quality molded bakelite sockets with plated bronze contacts. Three grounding lugs on base of each socket. 1 ½" mounting contents ing centers.

8-prong Octal \$0.15 .25 1528-L 8-prong Loctal

WAFER SOCKETS

enter	List
1 ½"	\$0.15
1 1/2"	.15
1 1/2"	.15
1 1/2"	.15
l ½"	.18
1 16 "	.18
1/2"	.18
1 16 "	.20
	enter ½" ½" ½" ½" ½" ½" ½" ½"

G-C MINIATURE TUBE SOCKETS

quality molded bakelite socket with metal saddle mounting. Made with phosphor bronze plated contacts for 7-prong tubes. Standard \(\frac{7}{8} \)" mounting centers.

List

\$0.17

RAKELITE MINIATURE SOCKET

For Miniature Tubes

Bakelite Socket

WAFER MINIATURE SOCKET
For Miniature Tubes
High grade bakelite sockets for
new miniature tubes. Phosphor
bronze contacts, for 7-prong
tubes. Standard %" mtg. centers.

Wafer Socket Wafer Socket with \$0.15 1542 .17 grounding strap











\$0.25



G-C 860 CAP

Spring action bakelite cap. action flat Approved brass blades. Nο

860 Cap \$0.25

G-C 861 CAP Spring action, finger grip rubber caps. Ap-

proved. minal brass blade. Nο 1 ist \$0.25

G-C 865 CAP Modern flush type rubber cap. Easy to

rubber cap. Easy to assemble. No exposed screws or wires. Nο 865 Cap \$0.25

G-C 867 PLUG

Popular screw plug for standard sockets. No. 867 Plug

G-C CUBE TAP

New type spring ac-tion cube tap with 3 outlets always available.

No. Brown \$0.30

G-C CORD CONNECTOR

Brown bakelite with bronze contacts.

\$0.25 Brown 863













G-C SURFACE **BLOCK**

3-plug. Bakelite outlet for extension cords Can fasten to wall or

No. Brown \$0.50

G-C AUTO ANTENNA PLUG

Shielded connector plug as used on Mo-torola and other auto radios.

G-C ANTENNA CONNECTOR JACK

Shielded jack to fit the 1740 plug for au-to antenna and phonograph connection.

\$0.25

G-C PHONO PLUG For all phonographs

and auto radio con-nections; RCA, Zenith, Philco and others.

No. 1742 \$0.10 1742-E Env. of 4, .40

G.C. PHONO **JACK**

Used for phonograph attachments. To be used with 1742 plug. List

No. 1743 \$0.15 1743-E Env. of 3, .40

G-C EXTENSION JACK AND CONNECTOR

For extending radio ant. cables and phono attachments. Fits 1740 or 1742 plugs. \$0.20



G-C MOTOROLA

LEAD ADAPTER

Adapter plug used to adapt bayonet type

connector to Motorola

type.

1745





G-C ADAPTER

SHELL

Used to change the Motorola fitting to

bayonet type connec-

\$0.15



CONNECTOR Used for connections on auto antenna and ground lines.

Nο





FUSE HOLDER 14 amp. iuse holder, long x

diameter. No List \$0.30

G-C FUSE CONNECTOR Regular Type Used on auto radios and other equipment radios

Completely assembled. No \$0.20

G-C ANTENNA CONNECTOR END To be used with regu-

lar antenna connec-tors. With bushing.



\$0.40







G-C REPLACEMENT PARTS FOR ANTENNA AND FUSE CONNECTORS

tor

1746

(a)

Connector 1796-GBox of 144 No. 1796 1795 Bakelite Bushing 1795-GBox of 144 No. 1795 1.40

G-C TERMINAL STRIPS

SCREW TYPE Laminated bake bakelite strips, rigidly structed, terr conterminals will not turn and short.

No. Contacts List 1772 1773 \$0.18 27. 3 1774 1775 .36 .54 1776 1777 1778 1779

SOLDER TYPE Mounted on laminated bakelite strips. Lugs securely fastened and

will not turn. No. Contacts List 1781 1782 1783 1784 \$0.05 .06 .07 .11 1785 .13 1786 1787

10

G-C PHONO

SPRING KIT

Kit contains assorted springs same as are used on phono turntables. With this kit. you can replace the broken or weak spring without waiting or

delay in service. No. 6478 Kit of 50 \$2.50 6479 Kit of 100 4.40



G-C AUTO FUSE INSULATOR SLEEVE

Insulating sleeve to fit regular fuse holders.

No. List 6720-E Env. of 16, \$0.40





.01

4.00





1788

1790





INSULATING CAM8RIC 10,000 Volts

Yellow varnished cambric. .010" thick. 1 ist No. 549 Roll over 210 sq. in. \$0.75 548 36" x 36", yd., any length 4.00

G-C LAMINATED BAKELITE **PANELS**

thick. Black. Ño, List 6" x 6" x 13" \$0.60 6" x 12" x 13" 1.10 591 592 12" x 12" x 2.20

G-C FYBEROID

"FISH PAPER" Fish paper has many uses around the shops for repair jobs where insulation electrical is required, .010'

No. 560 Roll \$0.50

40

G-C RUBBER KIT **ASSORTMENT**

Handy kit to keep in Handy kit to keep in the shop. Contains various sizes of rub-ber grommets, chas-sis mounts, etc. An exceptional buy.

List 7600 Rubber Kit \$1.00

G-C RADIO CORD SETS

Handy replacement cord sets, ready to attach to radio sets and appliances. Approved Brown parallel wir with plugs attached.

No. List 885 6 ft. 886-P 7 ½ ft. 6 ft. \$0.45 .60

EXTENSION G-C CORDS

G-C extension cords are made of approved wire ready to use with a plug on one end and 3-way tap on the other end. Brown.

No. List 6 ft. \$0.75 889 7 ½ ft. .90



CEMENT SIGNAL LIGHTS — CONNECTORS — CLIPS









G-C ONE-INCH JEWEL SIGNAL LIGHT

SIGNAL LIGHT

For signal devices of all types.
Bulbs change from the front; for socket bases as listed below. Oneinch mounting hole. Jewel colors:
Red, Green, Blue, Amber, Opal, and Clear (Specify Jewel Color).
No. Socket Jewel List
7901 110-V. Cand. Facett \$1.40
7902 110-V. Cand. Smooth 1.40
7903 Min. Bayonet Facett 1.40
7904 Min. Bayonet Smooth 1.40
7905 Min. Serew Facett 1.40 7904 Min. Bayon 7905 Min. Screw 7906 Min. Screw

Facett 1.40 Smooth 1.40

G-C 3/4-INCH JEWEL SIGNAL LIGHT

All purpose signal light with facetted jewels in colors of Red, Green, Blue, Amber, Opal. Clear. 18" mounting hole. Jewel removed from front. (Specify Jewel Color)

No.	Socket	List
7907	Min. Screw	\$0.80
7908	Min. Bayonet	.80
7909	110-V. Candel.	.80

G-C 1/2-INCH JEWEL SIGNAL LIGHT

Popular signal light, requires only 76" mounting hole. Facetted jewel removed from front. Colors: Red, Green, Blue, Amber, Opal, Clear. (Specify Jewel Color).

No.	Socket	List
7910	Min. Screw	\$0.35
7911	Min. Bayonet	.40
7912	110.V. Candel.	.40

G-C PANEL JEWELS

Complete assemblies in 1", $\frac{3}{4}$ ", and $\frac{1}{2}$ " diameters. Fit panels up to $\frac{1}{4}$ " thick. Brass nickel-plated. Colors: Red, Green, Blue, Amber, Opal, Clear. (Specify Jewel Color).

No.	Dia.	Jewel	Mtg. Hole	List
7913 7914	1/2 " 1/2 "	Facett Smooth	18" 7."	\$0.25 .25
7915 7916	3/4 " 1 "	Facett	16,"	.60
1910	1	Facett	1	1.10











G-C CLIP-ON PILOT LIGHT SOCKETS

Clip up and clip down types for replacements. Cadmium-plated.

No.	Type	List
7920	Min. Screw Clip Up	60.15
7921	Min. Screw Clip Down	.15
7922	Min. Bay. Clip Up	.17
7923	Min. Bay. Clip Down	.17
7924	110-V. Cand, Clip Up	.20
7925	110.V. Cand. Clip	
	Down	.20

G-C BRACKET-TYPE PILOT LIGHT SOCKETS

Sturdy bracket-up or bracket down type. Cadmium-plated. bracket-

No.	lype	List
7926	Min. Screw Bracket	
		\$0.15
7927	Min. Screw Bracket	•
	Down	.15
7928	Min. Bay. Bracket Up	.17
7929	Min. Bay, Bracket	
	Down	.17
7930	110-V. Candel.	
	Bracket Up	.20
7931	110-V. Candel.	
	Bracket Down	.20

G-C UNMOUNTED PILOT LIGHT SOCKETS

Cadmium plated, Ideal for replacements or special assemblies.

No. Type List 7932 Min. Screw Base \$015 Base \$0 7933 Min. Bayon. Base 7934 110-V. Candelabra .16

G-C PILOT LAMP **INSTALLER**

Makes it easy to install miniature dial bulbs, neon and candelabra lamps in hardto-get-at- places. All rubber.

7935 Installer \$0.40

G-C DOUBLE **ALLIGATOR CLIP**

Brand New! A clip on both ends. Handiest connector made for joining wires, making temporary circuits, repairs; for tests, experiments, etc. Cadmium-plated.

List 7758-E Env. 2 \$0.40













G-C MALE MICROPHONE CONNECTOR

Completely shielded. sturdy, single contact connector. Brass, bright chrome-plated. Steel spring cord protector.

No. 7940 Connector \$0.45

G-C FEMALE MICROPHONE CONNECTOR

Single contact female type used with No. 7940, 7941 and 7943 connectors. Complete, brass chrome-plated.

List 7942 Connector \$0.55

G-C MICROPHONE **CHASSIS UNIT** CONNECTOR

Single contact male connector for chassis. Used with type 7942 female connector. Supplied complete. Brass nickel-plated.

7941 Connector \$0.35

G-C MICROPHONE CONNECTOR

Single contact, closed circuit type, prevents open circuit noises when microphone is disconnected. Chassis type, use with type No. 7942 female connector. Brass, nickel-plated.

No. List 7943 Connector \$0.55

G-C MICROPHONE CONNECTOR CAP

Chrome plated cap with anchor chain for all connectors. Seal against dirt and prevent thread damage.

No. List Connector Cap \$0.50 7944

G-C INSULATED ALLIGATOR CLIP

Solder type with Red or Black insulated sleeve. Strong spring. Nickel plated.

No. List 5064 Red Clip \$0.20 5064-E Env. of 2, .40 5065 Black Clip .20 5065-E Env. of 2, .40













G-C CROCODILE CLIP

Set screw type. Teeth nest together to assure perfect contact with wires, etc. Cadmium-plated.

List Clip \$0.30

G-C WEE-PEE-WEE CLIP

Very small and thin nosed with set screw for wire. Phosphor for wire, Phosphor bronze, Ideal for coil work

No. 7755 Clip \$0.30

GC PEE-WEE

CLIP Popular test clip. Interlocking jaws assure positive contact. Set screw type.

No. List 7756 Clip \$0.12

G-C ALLIGATOR

CLIP Solder type, non-in-sulated. Strong spring for positive contact. Nickel-plated.

No. 5063 Clip \$0.12 5063-E Env. of 3,

G-C ALLIGATOR CLIP

Wire fastens under set screw. Handy for all types of connectors. Cadmium-plated.

7752 Clip \$0.18

G-C SCREW TYPE INSULATED ALLIGATOR CLIP

Very popular, Bright polished handles, Set screw for wire.

No. No. List 7750 Blk. Clip \$0.25 7751 Red Clip .25













CONNECTOR

Easily clips to the ends of screws. Positive fast connector.
No. List
6307 Each \$0.12 6307-GBox1++16.05

 $\frac{1}{2}$ " long by $\frac{7}{3}$ " wide. Handles up to No. 16 wire. No 6 Mtg. Hole. Nο List 6301 Each \$0.03 6301-GBox 144 2.30

G-C SMALL CLIP

G-C FAHNESTOCK CLIPS

34" long by 18" wide. Handles up to No. 14 wire. No. 6 Mtg. Hole. No. List 6302 Each \$0.03 6302-GBox 144 2.50

G-C MEDIUM CLIP

ALS)

G-C LARGE CLIP 116" long by 38" wide.

No. 8 Mtg. Hole.

List 6303 Each \$0.04 6303-GBox 144 2.65

(Also see other listing Page U-105)

G-C MEDIUM SOLDER LUG CLIP 34" long by 16" wide. No. 6 Mtg. Hole.

No. List 6306 Each \$0.04 6306-GBox 144 3.40

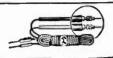
G-C DOUBLE CLIP 1 1/2"long by 16" wide.

No. 6 Mtg. Hole. No. 6304 Each 6304-GBox14421.40



GENERAL GEORGE CEMENT TEST PRODS—PLUGS—TIPS







G-C TEST LEAD WIRE

Ideal long-life replacement wire, extra flexible, 6000 volt insulation. Red and Black (Specify color).

No. List Env. 1 Red, 1 Black, 50" long, \$0.50 5049

100-ft. 5049-M 1000-ft. 45.00 G-C MASTER TEST LEADS

Heavy duty type. Very hest. 6000 volt test, 50" extra flexible wire. Solderless connectors. Polished, colored plastic prods, removable tips. Brass nickel-plated. One Red, one Black lead.

List Nο Test Leads \$1.50 5050

G-C TEST PRODS

Solderless type non-breakable fibre. Removable tip, brass nickel-plated.

Color List Size 5 1/4 " Red \$0.40 5041 5 ¼ " 7 ¼ " 5042 Black .40 5043 Red 7 1/4" 5044 Black

G-C LOW-LOSS **DELUXE TEST PRODS**

New polished low-loss material. Non-breakable. Moisture resistant. Withstands Solderless high voltages. type, brass nickel-plated.

List No 5045 Red \$0.50 5046 Black 50

G-C NEEDLE POINT TEST PRODS

Adjustable chuck tip for needle. 6" polished plastic handles in Red or Black. Brass nickel-plated chuck removable. Includes needle. (Specify color).

List Nο \$0.50 7701





G-C INSULATED

TEST PROD TIPS

1 104







G-C MODERN PHONE TIP PLUG

New type safety tip plug fits standard phone tip jack. Solderless connectors, brass plated nickel contact.

No. \$0.50 7704 Red 7705 Black .50

Unbreakable polished plastic insulated handles. Solderless connectors, brass nickel-plated. No.

5061 Red \$0.24 5061 Red 5061-E Env. 2 5062 Black 5062-E Env. 2 .40

G-C TEST PROD TIPS

Solderless type, brass nickelplated. Non-insulated. Wire fastens easily.

No. List \$0.15 5060 5060-E Env. 3 -40

G-C PHONO NEEDLE POINT TEST PROD CHUCK

Threaded chuck fits 14-20 threaded hole. Needle removable. Brass nickelplated. Includes needle.

List No. 7702 \$0.20

G-C HEAVY DUTY PHONE PLUG

Standard type as used on test prods, leads, etc. Fits snugly in 1/4" hole. Brass nickel-plated.

No. \$0.15 7706



G-C SOLID STAND-

ARD PHONE TIP

Solid brass type made to

RMA specifications. Bright

nickel-plated.

6321-E Env. 8

6321-G Pkg. 144



G-C STANDARD PHONE TIP

Made of drawn brass with hole through center for easy soldering of wire at tip. Bright nickel-plated.

\$0.40 6.75

List 6320 Env. 16 6320-G Pkg. 144 6629 Jar 30 \$0.40

G-C PHONO NEEDLE POINT TEST PROD CHUCK

Push on type fits snugly in 1/4" hole. Brass nickel-

List No. 7703 \$0.20



G-C INSULATED PHONE TIP PLUG

Fits standard phone tip jacks. Polished non-break-able low-loss plastic insu-lated handles. Brass, nickel-plated tip. Minimum con-

No.

tact exposure. List \$0.20 Rlack



G-C INSULATED SPADE LUG Tapered spade lug fits all

screws or terminal strips up to No. 10. Insulated female end fits banana plugs.

No List \$0.20 7712 Red Black .20







.65



G-C PHONO TIP **JACKS**

Standard type with phosphor bronze spring contacts. Fits ¼" hole and panels up to 3/8" thick. Brass parts nickel-plated.

No. 7714

List \$0.15

G-C INSULATED PHONE TIP JACKS Standard insulated type

Standard insulated type phosphor bronze spring contacts. %" insulated head. Fits ¼" hole and panels up to ¼" thick. Brass parts nickel-plated.

List No. 7715 7716 Red \$0.20 Black

G-C SPRING BANANA PLUG

Insulated solderless type with polished insulated handles. Non-collapsible spring action plug nickel-plated. Metal parts

No. \$0.30 7730 Red .30 Black

G-C SET SCREW TYPE BANANA PLUG

Insulated set screw type. Polished insulated plastic handles. Non-collapsible spring action banana type plug. Nickel-plated metal parts.

No. List 7732 7733 \$0.25 Red



G-C SMALL BANANA PIN PLUGS

Approved silver-plated plugs with straight shank. Can be riveted or soldered. For wires, multiple plugs, etc.

6400 Env. 10 \$0.40















G-C SPRING BANANA PLUG

Standard size with 6-32 threaded shank. Use on plug-in coils, terminal strips, etc. Complete with lug and nut. Brass nickelplated.

No. 7736

1 ist \$0.15

G-C SPRING BANANA PLUG

Standard size with 6-32 female thread on end. Supplied with screw and solder lug. Brass nickel-plated.

7737 \$0.15

G-C BANANA **JACK**

Standard size banana pin jack. Fits ¼"hole up to 3/8" thick panel. Nut and lug supplied. Brass nickel-plated.

List No 7740 \$0.15

G-C INSULATED BANANA JACK

Standard size with polished plastic insulators. Fits 1/4" hole, up to 3/8" thick panel. Nut, lug, and insulators supplied. Brass, nickel-plated.

No. List 7741 Red \$0.20 7742 Black .20

G-C RCA

PLUG AND JACK RCA types used on many type receivers. Also used as auto antenna connectors.

PHONO PIN

No.	List
1742 Mdgt. Plg.	\$0.10
1742-E Env. 4	.40
1743 Midget Jck	15
1743-E Env. 3	.40

G-C INSULATED

BANANA PLUG OR PHONE TIP JACK

Standard size lated combination jack. Brass nickel-plated with phosphor bronze spring contacts. Fits 1/4" hole, panels up to 5/8" thick. No. List

7744 7745 Red \$0.30 Black



CEMENT ALIGNMENT TOOLS - KITS

G-C COMBINATION ALIGNMENT TOOL



Popular bone fibre tool. Consists of screwdriver with metal nih, 1/4" slotted hex wrench and 1/8" hex wrench on other end.

5014

\$0.85

ALIGNMENT COMBINATION TOOLS G-C No. 5015 ALIGNMENT TOOL



Popular combination tool. Bone fibre. Includes motal screwdriver tip to fit hex wrench, 156" hex wrench, 154" slotted hex wrench and fibre screwdriver with metal

No. 5015

\$1.35

DELUXE COMBINATION ALIGNMENT TOOL =110

Most useful tool designed to use on tuseful tool designed to use in cramped quarters. Bone Fibre. Consists of short screwdriver with metal nib and 1/4" hex side wrench with slotted 1/4" hex end wrench, 1/5" hex wreuch and heavy metal screwdriver tip.

No. 5016 \$1.35

G-C BONE FIBRE

ALIGNMENT

SCREWDRIVER

Indispensable for all sets. Tough

black bone fibre resists chipping. Can be reground. 1/4" blade on each end.

G-C INSULATED HEX WRENCH AND DRIVER



Combination insulated 4," hex wrench and screwdriver, Screwwrench and screwdriver. Screw-driver can be extended for extra length. Made of bone fibre.

No. List Extends 7"-13" Extends 11"-17" 5005 \$0.75 1.00 5006

G-C NON-EXTENSION INSULATED WRENCH AND DRIVER

Combination tool ¼" hex wrench on one end and screwdriver on other. 6" overall length. Made of bone fibre.

\$0.40

ALIGNMENT SCREWDRIVERS G-C ALIGNMENT SCREWDRIVER

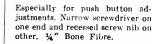
Popular insulated tool. New low inductance material with metal nib. Strong and flexible. Two

No. 5000 5088

1/4" x 6" 7" x 6"

List \$0.40

No. 5004 \$0.40 G-C RCA TYPE ALIGNING SCREWDRIVER



No. 5003

G-C POLYSTYRENE ALIGNMENT SCREWDRIVER

For U.H.F. sets. Best low loss material. '4" blades on both ends, Blades easily reground.

\$0.40

G-C DUPLEX NO-METAL ALIGNMENT SCREWDRIVER

In polystyrene or hard bone fibre. ¼" blade on one end and ½" blade on other. 6" long. Tips easily reground.

No. 5009 5010

Bone Fibre Polystyrene **G-C BALANCING TOOL**

\$0.40 40

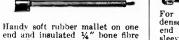
G-C DUPLEX ALIGNMENT **SCREWDRIVER**

Made of Genflex low-loss material. Especially strong. 1/4" driver on end and 3/2" on other. Metal tips for extra strength.

1 ist 5001 \$0.75 G-C DUPLEX TUBE

TAPPER

\$0.75 G-C MULTI-PURPOSE TOOL



\$0.65

List

For neutralizing padding con-densers and iron core tuners. One end metal screwdriver, other sleeve socket screwdriver. Best steel, fibre handle.

No. 5091

\$0.75

List

G-C PHILCO, RCA TYPE TRIMMER TOOL



For neutralizing air trimmers. $\sqrt{3}$ " bone fibre. Special clip-on end, metal tip on other.

List No. \$0.60

G-C NEUTRALIZING TOOL



U.S.A. type TL-138-B. Special short tool. Bone Fibre.

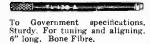
5066

\$0.50

G-C U.S.A. TYPE TL-138-A ALIGNING TOOL

For adjustments in close quarters.

Two ¼" hex wrenches; one on side and other on end. Fibre screwdriver with metal tip.



No

Nο

5098

List \$1.00

G-C CABLE EYELET TOOL





cables, part assemblies, etc. In-cludes clincher punch and base. Tempered steel.



eyelets and rivets on dial

screwdriver on other.

\$1.00

G-C DIAL CABLE TOOL



Makes it easy to replace dial cords and springs. A necessity in cramped quarters.

Nο. 1 ict 5096 Dial Cable Tool \$0.75

List

\$19.95

19.95

G-C FLEXIDRIVER



Flexible shaft for "hard to get places." Insulated guide for tip. Army Navy approved, 7" overall length,

No.

\$2.00

G-C ALL-PURPOSE ALIGNMENT TOOL KIT

Most popular kit. Seventeen tools designed into nine basic tools some of which telescope into each other. Roll type leather-



ette case. Includes one each G-C tools Nos. 5001, 5003, 5004, 5011, 5016, 5017, 5053, 5056, 5057.

No.

5023 Kit

List \$6.25

G-C PROFESSIONAL ALIGNMENT TOOL KITS

Complete kits. Be prepared to service every set with these DeLuxe Alignment Kits. These are the preferred kits for radio men. In a handy roll-type leatherette case or a steel partitioned box. Kits contain one each of the following G-C tools described on these pages: Nos. 5000, 5001, 5002, 5003, 5004, 5005, 5011, 5012, 5013, 5015, 5016, 5017, 5018, 5019, 5031, 5032, 5033, 5034, 5035. 5051, 5053, 5056, 5057, 5081, 5082, 5083, 5084, 5085, 5086, 5087.

No. Kit in Roll Type Case 5024 5025 .Kit in Steel Box



No. 5024

No. 5025





CEMENT ALIGNMENT TOOLS - KITS

G-C ALIGNMENT TOOLS AND WRENCHES

50

G-C INSULATED ALIGNING WRENCHES



Popular sizes. Hexed full-length bone fibre tubing. Just cut off to renew when worn.

		Across	S	
No.	Length	Flat	Diam.	List
5051	5"	18"	7 "	\$0.30
5052	5"	1/4 "	3/8"	.25
5053	6"	1/4"	3/8"	.35
5054	8"	1/4 "	3∕8″	.40
5055	12"	1/4 "	3/8 "	.50

G.C PHILCO TYPE ALIGNMENT WRENCH



5" Hex Wrench on one end, metal hook for air trimmers on other. For RCA, Victor, Philco, etc. Bone fibre handle.

lo.	List
85	\$1.50

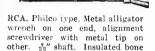
G-C DUPLEX WRENCH ALIGNMENT TOOL

Long life 1/4" hex wrench on one end and is" hex wrench on other. Brass nickel-plated. Tapered bone fibre bandle

(ye)

No.	List
017	\$1.25

G-C DUPLEX ALLIGATOR WRENCH



No.	List
5011	\$0.50

G-C DOUBLE ALLIGATOR ALIGNING WRENCH



tor wrench on one end and 1/4" brass hex wrench on other. Pop-

Nο 5012

List \$0.50

G-C INSPECTION MIRROR



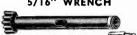
For close inspection of Newt parts in hard-to-get-at quarters, under chassis, etc. Long handle.

G-C WRENCH AND SCREWDRIVER ALIGNING TOOL

Popular 1/4" hex wrench on one end, 37" metal nib screwdriver on other. Bone fibre insulated handle.

5013

G-C BAKELITE 5/16" WRENCH



Molded 16" hex wrench with reinforced brass collar. Metal screwdriver tip included.

5083

fibre

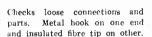
\$0.50

G-C "STRATO" TUNING WAND

Chrome brass cylinder, iron core on ends of low-loss genflex rod. Inserting core in coil increases inductance, brass end decreases inductance. Checks tuning fast.

List \$1.00

G-C TEST PROBE



5082

50

\$0.60

\$0.50

G-C SCREWDRIVER



Insulated. One size for knobs, other for small parts. Best temnered steel

No. 5056 5057

G-C BAKELITE ALIGNMENT TOOL



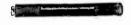
U. S. Army type TL-207. Combination %" Hex Wrench with telescoping screwdriver. Moulded bakelite, reinforced with metal.

List

\$0.25 .75

List

G-C ARMY-NAVY TYPE **NEUTRALIZING TOOL**



Approved. Double end bakelite tool 32" diam. x 6" long.

No. 5099

List \$1.25

G-C ZENITH **PUSH-BUTTON WRENCH**



" hex on one end, slotted on ther. Tempered steel, nickelplated. Necessity for Zenith sets.

5094 \$0.17

G-C CONTACT ADJUSTER



Handy for contacts on switches, condenser plates, relays, iacks. pinball-coin machines, radios. Tempered steel, nickel-plated.

\$0.17 5095

G.C. RENDIX-RCA TELE.

VISION SCREWDRIVER

G-C TELEVISION AND F-M WRENCH AND SCREWDRIVER

Adjusts smallest trimmer condensers. Small $\sqrt[3]{2}$ " screwdriver on one end, reinforced $\sqrt[5]{6}$ " hex wrench on other. 6" long. Bone fibre.

5067 \$1.00

G-C TELEVISION AND F-M TOOLS

G-C TELEVISION ALIGNING WRENCH



New Television Tool! $\frac{1}{16}$ " socket wrench. $\frac{3}{16}$ " steel shaft with insulated handle. Approx. 6" overall length.

5080

List \$0.75

G-C T-V AND F-M ALIGNING TOOL



Socket-type screwdriver of tempered steel. Bone fibre handle.

5018

5020

push buttons, television and F.M. Small diameter. Metal tip on one end and recessed tip on other. Insulated bone fibre.

Nο

\$0.75

G-C K-TRAN ALIGNING TOOL

Special bone fibre screwdriver one end, reinforced $\frac{1}{16}$ " hex wrench driver on other. Especially for F-M and television sets.

5097

List \$0.75

G-C DELUXE ALIGNMENT KIT

Fourteen most popular tools in-cluding Flexible Shaft Screwdriver and Tun-ing Wand, designed into sev-



signed into seven basic tools, some of which telescope together. Contains one each Nos. 5002, 5004, 5011, 5014, 5016, 5017, 5019. In leutherette roll-type case.

No 5026

Kit

G-C NX ALIGNING KIT

Popular approved Army - Navy Kit for all sets. Fourteen tool applications, some telescoping together, to tools. Contains Nos. 5004, 5011. 5017. 5015, 5016, and leatherette



\$0.75

Kit. \$6.50

G-C VEST POCKET ALIGNING KIT

Easy - to - carry all-purpose kit of popular tools. Four tools with telescoping parts making them equiva-lent to six. Con-tains Nos. 5012 equiva-5000, 5003, 5004 and leatherette case



No. 5022 Kit \$3.00

G-C TE-45A **NEUTRALIZING KIT**

Signal Corps. All popular bal-ancing tools to make an all pur-pose kit. Con-tains two each



tains ... 1051, - 5052, and one each Nos. 5019, 5003, 5000, and 5" screwdriver in roll-type ... 140 case.

Kit

5021

\$6.75



CEMENT BATTERY PLUGS - KITS - STAPLES

G-C RADIO BATTERY PLUGS

_		G-C 1	CADIO B	ALIEKI	PLUGS		and the same of
	W	100	1 11	14 1		4 1	
7903	7804	7805 71	106 7807	780%	7809 78	0 7811	7812
1	14	. 4	. K	1			
7813	7614	7815 78	116 7217	7818	7819 782	0 7821	7822
2	311	111		أزير	sil.	W	dr.
7623	7824	7625	7820 7	127 782	7629	7.830	7431
Part No.	Voltage	For Burgess No.	For Eveready No.	For R.C.A. No.	For Phileo No.	For Ray-O-Vac No.	List Price
7803	45 "B" Large	A30. B30, M30. Z30	482. 738. 762	VS012, VS013, VS014, VS015	P210. P305	430P. P7830, P5303	\$0.11
7804	Same as	No. 7826	except has	Fahnestoc			.30
7805	Same as	No. 7829.		Fahnestoc		24.00.4	.45
7806	4½ "A" 45 "B"	G-3 A30.	746 482.	VS012.	P100	1'-83A	.11
7807	Small	B30. M30. Z30	738. 762	VS013. VS014. VS015	P210, P305	430P. P7830. P5303	-11
7808	1½ "A"	4F. 4FL, 6F, 8F, 8FL, TE	741. 742. 743. 1052P	VS004, VS005, VS007, VS008	P94, P96, P8F1	P94A. P94L. PX. P96A. P98A. P98L	.11
7809	1½ ''A''- 90 ''B''	17GD60. 5DA60. 6TA60	758	VS022. VS043	P60D11L	AB82. 10793	.13
7810	6 ''A''	2F4. 2F4L, F4PI, T5	A509, 718, 744, 747	VS009. VS010. VS011	P4F4R	P694A. P696L. P698A. P698L	.13
7811	6 "A"- 90 "B"	2F4B60.					
7812	7 1/2 ''A''	etc. G-5	687	VS003		P85A	.15
7813	7½ ''A'' - 63-90 ''B''	6FA60, 4GA41, 4GA42	- 001	VS037	P60A-4L P41A4G	AB419	.13
7814	7½ 'A''- 90 ''B''	G5A42, F5A60		VS038	P87, P841	AB794	.25
7815	67½ "B"	XX30, XX45	455. 467	VS016. VS056		P4367	.09
7816	67½ "B"	XX30. XX45	455. 467	VS016. VS056		124367	.11
7817	Same as	No. 7803,	except has	Fahnestoc	Clips.	1 1001	.30
7818	8ame as 6 ''A''- 75 ''B''	No. 7808, G4B50,	except has	Fahnestock	Clips.		.25
7820	75 "B"	etc.					.15
7821	6 "A" 90 "B"	F4B60		VS048			.20
7822	6 'A''- 90 'B''	2F4A60		VS044	P60A8F4	AB694	.13
	9 ''A'' 90 ''B''	4FA60					.25
7823 7824	Same as	No. 7824, 20F2	X125	VS025	P8024	P9403	.25
7825	Batt.	Usalite	AB5671	7 km/2-1	P60AI10	1 9400	.18
7826	4 1/2 "C"	2370PI	X771	V8030	P3D	P231W	.15
7827	4 ½ ''C'' 135 ''B''- 9 ''C''				37-08. 3738, etc.		.25
7828	135 "B"- 13½ "C"				34. 34 A . 39.		.30
7829	22½ "C"	5156PI	768	VS031	39A P15B5	P5151	.22
7830	2 prong 1	arge with o	one thin and	one thick.	Popular or		.15
7831	9 "A"-	F6A60, G6M60	753. 754	VS018. VS019	P841A	AB878, AB994	.25



G-C RADIO BATTERY PLUGS

For all plug-in radio batteries. It pays to have an assortment to be ready for all repairs. Plugs as listed above. Complete with box and handy reference chart.

	C A INCHIATED SELL COLORS	
7800	50 Asstd. Plugs, Cardboard Box	6.50
7801	100 Asstd. Plugs, Metal Box	\$12.00
No.		List

G-C INSULATED BELL STAPLES

Saddle	-type insulated star	oles for	No. 1 No.	2 No.3 No.6 No.6	No. 7 No. 10
holding	wires in place a	nd out	6		10. 1
of the			(P) (F	nnnn	n
No.		List	l f f f		
	Fig. 1, % " x ½"			ן עיייע	
1751	Box 59, No. 1	\$0.25			Dr y
1752	Box 100, No. 1	.40	No.		List
	Fig. 2, &" x %"		1758	Box 100, No. 5	\$0.40
1753	Box 50, No. 2	.25		Fig. 6, 1/4" x 3/4"	,
1754	Box 100, No. 2	.40	1759	Box 100, No. 6	.40
	Fig. 3, %" x %"			Fig. 7, 1/4" x 1/8"	,
1755	Box 50, No. 3	.25	1760	Box 100, No. 7	.40
1756	Box 100, No. 3	.40		Extra Large Cabl	e Size
	Fig. 5, 1/4" x 1/8"			Fig. 10, %" x	1/4 "
1757	Box 50, No. 5	.25	1761	Box 100, No. 10	.70







G-C DIAL AND KNOB REPAIR KIT

Handy assortment of knob springs, set screws, dial springs, idler pulleys and drive rubbers in box. Nο

List 1015 70-pc. Kit, \$2.25 1016 150-pc. Kit, 4.50

G-C PLASTIC JAR HARDWARE **ASSORTMENT**

Approximately 1000 assorted screws, nuts, washers, springs. wasners, springs, clamps, eyelets, grommets, terminals, etc.
No cast-offs — only regular hardware. Plastic jar with screw cap.

No. List 6064 1000 Asstd. \$1.65 6056-E Env. 100 Asstd.

G-C HELL BOX

A grand assortment of useful hardware; screws, nuts, lugs, clips, washers, clamps, etc. Thousands of items needed every day. Metal hinged box.

List 6500 \$3.25







G-C STEEL HARDWARE RACK

Steel racks, hold No. 4002 2 oz. glass bot-tles or plastic jars. Attractively finished. Welded construction. Heavy steel

No. Size List 4010 20 Jars 4012 40 Jars \$2.00 3.75

G-C STEEL STOCK BOXES

Slide-in drawer type cabinet box for parts. Made so can be stacked. Attractive finish, steel welded construction with handle. Size 13 1/2" long, 6" wide, 4" high.

No. List 4001 \$3.25

G-C SERVICEMEN'S HARDWARE ASSORTMENT

Inexpensive complete hardware assortments. Similar to larger hardware lab Ass't No. 1 like No. 6601; and like No. 6601; and No. 2 like No. 6602 (Page U-139). Items individually packaged.
No. Asst. List

No. 6303-D 6303-D #1 \$8.00 6603-2-D #2 8.00



G-C VENTILAT. ING PLUGS

To ventilate chassis. amplifier, racks, trans-mitters, etc. Snaps into 1-inch hole. Plated.

1709-E Env. 2 \$0.40

G-C PLASTIC HARD-WARE JARS

4 oz. sizewide mouthed plastic jar with screw type cap. Ideal for hardware.

List

\$0.35

4000



G-C GLASS HARDWARE JARS

Wide mouthed jars, for storing small radio parts, screws, nuts, etc. Includes cap.

No. 4002 4004 4008 4009	2-oz. 4-oz. 8-oz. 16-oz.	\$0.15 .22 .30







G-C SOLDERING COOLANT AND FLUX ATTACH-MENT

Here's a handy at-tachment that you can put on any sol-dering iron and speed up production and repairs. No waiting for solder to cool. Dip the brush in a coolant of water or alcohol and cool the solder instantly Also can be used for soldering flux or paste.

No. 720 List \$0.25

G-C SOLDERING WIRE COUPLERS

(Patent Pending)

New patented connectors to be used when re - connecting cut wires and leads, when making tests, etc. Saves time! Simply slip between wires and solder. Assorted lengths.

List 7500-E \$0.40

G-C STAPLE DRIVER STAPLES

Hardened steel staples in cartridge form to fit staple drivers. Lacquer coated.

No. List 430 Box 250 \$0.60



For holding 300-ohm lead wire to base boards, etc.

No. List 8020-EEnv. 30 \$0.40 8020-GBox144 1.25

Standard Models

List

\$6.00

6.00

G-C STANDARD SPEEDEX WIRE STRIPPER

Fast operating precision made hand tool for stripping insulation from all types of wire. Very easy to operate, Strips 750 to 1000 wires per hour. Used by girls or men. All blades are interchangeable and easily

replaced



No.	Wire	List	No.	Wire	L
733	12 to 20	\$6.00	733-G	For #18	
733-A	14 to 30	6.00		S.J. or pa	
733-B	10 to 18	6.00		lel wire	\$6
733-C	8 to 10	6.00	733-H	For the n	
733-D	16,18,20,2	2 6.00		300-ohm t	
733-E	14, 16, 18	6.00		transmissi	
733-F	10, 12, 14	6.00		line	6

Similar to standard models except has the "stay open feature" with the new Speedex "Trig-O-Matic Action." Automatically holds jaws open until wire is removed, and prevents bending or crushing of fine wires. Has on-off mechanism so tool can be used as standard model if desired,

G-C AUTOMATIC SPEEDEX WIRE STRIPPER

Automatic Models

	0.8					
No.	Wire	List	No.	Wire	List	40
744	12 to 20	\$8.00	744-G	For #18	P.O.	
744-A	14 to 30	8.00		S.J. or pa	aral-	W I
744-B	10 to 18	8.00		lel wire	\$8.00	TRICCE ACTION
744-C	8 to 10	8.00	744-H	For the n		LETIES.
744-D	16,18,20,22	8.00		300-ohm		1)
744-E	14, 16, 18	8.00		transmissi		7.0
744-F	10, 12, 14	8.00	ĺ	line	8.00	

G-C SPEEDEX WIRE STRIPPER KIT

Wire stripper complete with seven different size blades put up in a specially designed permanent steel box. For wires No. 8 to No. 30. Helps keep all the parts together in one kit. Available with automatic or standard model strippers.



	(T)	
No.		List
733-K	Standard Stripper Kit, with blades	\$15.00
744-K	DeLuxe Automatic Stripper Kit, with blades	17.00

G-C SHUR-GRIP PLIER WRENCH

Here's a universal handy all-purpose plier wrench. This is something new and different from the average Grip Wrench, It works with a short pawl against the cam handle, giving it extra power. IT UN-LOCKS WITHOUT SNAPPING THE FINGERS. Jaws are forged from alloy steel and specially heat treated for toughness and durability. It is a high quality tool.

			Dealer's
No.		List	Net
767	7" Shur-Grip	\$3.50	\$1.80*
770	10" Shur-Grip	3 .9 5	1.95*







G-C SPEEDEX REPLACEMENT BLADES

Fit standard and automatic models. Blades interchangeable.

No.

		F131
3W	12 to 20	\$1.50
	14 (0 30	1.50
	10 to 18	1.50
	8 to 10	1.50
3W-D	16, 18, 20, 22	1.50
3₩-E	14, 16, 18	1.50
3W-F	10, 12, 14	1.50
3W-G	Blades for parallel	
	No. 18 P.O.S.J. or	1
	similar	1.50
3W-H	Blades for the new	,
	300-ohm television	1
	and FM twin trans-	
	mission line	1.50

G-C SPEEDEX STRIPPER BENCH HOLDER

Bench type holder for any model Speedex Wire Stripper, Converts a hand operated tool to a bench type and increases production up to 2,500 wire strippings per hour. Steel.

No.		List
755	Bench Holder	\$3.75

G-C SPEEDEX TRIG-O-MATIC PLATE

(Patent Pend.)

Converts any standard model Speedex Stripper to an Automatic Model, Easy to install.

No.			List
756	Trig-O-Matic only	Plate,	\$2.00

G-C SOLDER IRON TIPS

Best grade hard-drawn copper, bright plated to resist corrosion. Heats fast and holds heat.

No.		List
8124	1/4" x 3" Tip 5	\$0.45
8124-D	Display 12 No. 8124	5.40
8125	₁₁₁″ x 4 ½ ″ Tip	.55
8125-D	Display 12 No. 8125	6.60
8126	3/8" x 4 1/2" Tip	.60
8126-D	Display 12 No. 8126	7.20
8127	78" x 4" Tip	.75
8127-D	Display 12 No. 8127	9.00









G-C INSPECTION LITE

Portable type, lights up those "hard-to-see" spots. Operates on 110-120 volts AC or DC. Cord approx. 6 ft. long. Modded handle and non-inflammable clear plastic strictly over halb. shield over bulb

No.		List
705	Inspection Light	\$1.9 5
704	Replacement Bulb for No. 705	.17
704-S	Clear Plastic Shield	.17

G-C LO-VOLT TESTER

For 0-15 volts AC or DC. For all low voltage testing on cars, generators, batteries, bell circuits, etc. Shielded bulb easily replaced. Molded plastic handle and in-sulators.

No.		List
5125	Lo-Volt Tester	\$1.25
5126	Bulb for No. 5125	.25
51 27	Shield for No. 5125	.15

G-C THERMO-VOLT **CIRCUIT TESTER**

Tests from 15 to 60 volts AC or DC on thermostats, aircraft, trains, marine lighting, 28-32 volt light plants, etc. Molded plastic case and insulated tips.

No.	List
5150	\$1.75

GC CARBON BRUSH KIT

Complete assortment replacement brushes, for vacuum cleaners, washing machines, ironers, pumps, fans. etc. Contains 92 brushes and 18 springs.

No.	List
7000	\$8.25



GENERAL GENERAL SERVICE AIDS—TOOLS—SHIMS

G-C CHASS-EZ (Pat. Pending)

New wonder tool makes the Serviceman's job easier. Its simplicity is its chief merit. Chassis can be installed on "Chass-Ez" in five seconds. All one unit - no extra bolts or nuts to adjust. Heavy steel, riveted construction, nicely plated.





G-C PHONO TURNTABLE STAND

New improved model, adjustable and inexpensive. Adaptable to all turntables. Raises the turntable 15 inches above bench and can be pivoted on the swivel joints for easy examination or repairs. Sturdy steel construction. Plated.

No. 5205

List \$7.30

Dealer's Net Only 4.38



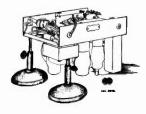
G-C RADIO JACKS

Permanent type adjustable jacks. All metal construction. Adjustable to fit any set or conditions. Easily and quickly adjusted, Two jacks supplied with three extension rods - one extra long. You need several sets in your shop.

No. 711

List \$2.15

Dealer's Net Only 1.29



G-C RADIO CHASSIS GUARDS

Inexpensive guards that protect the chassis and tubes when servicing. Set can be turned in any position. Easily applied and adjustable to all sets. Permanent plated metal construction.

709

\$2.50

Dealer's Net Only 1.50



G-C MINIATURE TUBE PIN STRAIGHTENER

Saves tubes! Straightens without damage the Saves tubes Straightens without damage the pins on the fragile miniature tubes such as 185, 6AK5, 9002, etc. Just insert tube between guide pillars into precision base die and tube prongs are straightened and properly spaced. All metal.

No. 5191

For 7-pin tubes 8105 For 9-pin tubes



G-C TUBE AND PARTS EXTRACTOR

\$1.00

1.00

U. S. Signal Corps part No. TL 201. Handy prong tool for extracting tubes and picking up parts, Rubber cushions on prongs.



Tube Extractor

List \$1.50



G-C NE-O-LITE

Simple, safe, electrical circuit tester. Uses neon glow lamp which varies in brightness according to voltages. Tests cords, appliances, automotive ignition circuit, fuses, radios, electric fences, etc. For 60-volts AC to 550 volts AC or DC. Molded plastic, handy vest pocket size. Buy a display and sell your customers.

No. 5100 5112-D

G-C NE-O-LITE

WIRE

Ne-O-Lite Display 12 No. 5100

\$0.50 6.00 G-C RESISTOR



List

Wire same as used on Ne-O-Lite Testers, # 18 stranded, rubber covered with a red or black braid, var-nished. For ignition Required resistor when using No. 717 neon lamp on voltages of 60 to 550 volts AC nished. For ignition wiring, motor wiring, etc. Red or Black or DC. Connect in series.

No. 5113 100 Ft. \$3.75 718

Specify color.

\$0.10

G-C NEON FOR NEON LAMP GLOW LAMPS

> NE-T2 lamp as used in testers, appliances,

as pilot light, etc. List \$0.20

G-C AMO MINIATURE TUBE PULLER (Pat. Pending)

Prevents burned fingers and broken tubes. Makes it easy to remove and install tubes such as 6AG5, 50B5, etc. Works on suction and vacuum principle. Operates just by pressing on the tube and to release, just press the release button. Tube protected by rubber sleeve. Gets where your fingers can't reach. Permanent metal

No. 5093 8106

For 7-pin tubes For 9-pin tubes

List 1.65

\$0.65



G-C FIBRELOID SPEAKER SHIMS

Shims made of tough and flexible fibreloid. Nonmagnetic. 4 each of 5 sizes - twenty in all: Sizes, .005", .0075", .010", .0125", and .015". Color coded. Supplied in gold lettered leatherette snap case with instructions

No. 702

Kit



G-C SWEDISH STEEL SPEAKER SHIMS

Makes it easier to center speaker voice coil. Permanent flexible Swedish steel, 4 shims each of 4 sizes coded for identification: .004", .006", .008" and .010" thick. Supplied in gold stamped leatherette partitioned snap case. Complete with instructions.

No. 701

Kit

List \$0.70



NEW! G-C SPEAKER SHIM KIT

For every type of speaker adjustment. A generous supply of Fibreloid and bronze shim stock in the various widths and thicknesses needed for speakers. Non-magnetic material, Stock can be cut to exact requirements. A long-lasting assortment. Complete instructions.

No. 7720

List \$2.00



GENERAL CEMENT

RECORDING WIRE STATIC CHASER — TOOL KITS

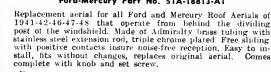
G-C RECORDING WIRE



For all wire recorders. Includes plastic leads. Permanent recordings which can be replayed indefinitely. Finest quality reproduction on stainless steel wire. Standard RMA spool fits Webster, Air King, Sears Roebuck, etc.

No.	Leader	s w	ith	Sp	ools	:									Dealer's Net
5171	1-hr. Spool	,													\$3.25*
5172	1/2 -hr. Spool														1.95*
5173	¼ -hr. Spool				,										1.30*
5174	Leaders only,	fo	r A	rm	our	ty	9e :	reco	rde	rs,	per	pa	ir	٠	.15*
5176	Empty Rewin	ıd	Spo	oi											.45*

G-C REPLACEMENT AUTO AERIALS FORD ROOF AERIAL Ford-Mercury Part No. 51A-18813-A1



1941-42-46-47-48 that operate from behind the dividing post of the windshield. Made of Admiralty brass tubing with stainless steel extension rod, triple chrome plated. Free sliding with positive contacts insure noise-free reception. Easy to insure that the without changes replaces or regingle agricult. Compared to the plate of the property of the plate of the property of the plate of the plat stall, fits without changes, replaces original aerial, complete with knob and set screw.

No. 7056

Ford Roof Aerial

\$2.25

BUICK REPLACEMENT ANTENNA Buick Part No. 980.488

Standard Buick Roof Aerial Mast. The replucement mast for Buick Roof Aerials on models 1940 through 1949. Easy to replace — merely tightens into position with a set screw. Admirally brass tubes with a stainless steel top rod. Chrome-plated. Each mast individually packed in a paper tube. Standard packing — 10 tubes to a carton.

7057

Buick Antenna Mast

\$2.75

G-C IGNITION SUPPRESSORS



A rugged long-life assortment of bakelite auto radio ignition sup-Resistance, 10,000 ohms (V-8 types, 50,000 ohms). Resistors, moisture-proofed to eliminate variations due to weather changes. Impervious to heat, oil, moisture and mild acids. All metal parts brass. Good for more than 50,000 miles.

	Part	b Dians.	Good	ioi moi
, .	No.			List
(a)	1501	Bracket	Type	\$0.30
(b)	1502	Ford V8		.30
(c)	1503	Ford V	8 Bru	sh
		Type, 35 Cars	33, 3	4,
(a)	1504	Ford V		
		Type, 3	6 to 4	0
		Cars		.30

(e)	No. 1505	Screw Ty	pe, Uni	List \$0.30
(f)	1506	Snap-On	Type	.30

(g) 1507 Distributor Type .30

(h) 1508 Cable type for Splicing Cables .30

G-C SPRING MAKER (Pat. Pending)



Makes all types of coil springs compression or extension types - with any number of coils or degree of wire pitch. Designed for simple adjustment and operation with any size spring wire. Necessary wherever springs must be made fast or to special specifications. Liberal supply spring wire furnished with each winder, Fastens to any bench.

No. 5209 5210	Spring Winder and Asst. Spring Wire Replacement Asst. Spring Wire	List \$16.58 2.50	Dealer's Net \$9.95* 1.50*
---------------------	--	-------------------------	-------------------------------------

G-C STATIC POWDER AND INJECTOR GUN



It really works, cuts down auto ra-dio static. Inject powder in tubes, and eliminate wheel tire static. Easy to apply. Powder also cuts down tire trouble by eliminating those pin-point tube leaks caused by tire static discharge, Powder blown in-to tube with G-C Injector Gun. Every car should be treated with G-C Static Chaser Powder,

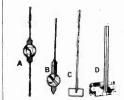
No. 5604 5605 5606	Injector Gun, only Packet Static Powder for 5 tires (1 car) Kit, one No. 5604 Injector, and one No. 5605 Powder	List \$1.50 1.00 2.50
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G-C DIAL POINTER KIT

A complete kit of 10 assorted dial pointers. Pointers come in a clear transparent plastic case which keeps the pointers in perfect condition.

No.	List
6810	\$2.95



G-C DIAL POINTERS

Popular replacement pointers. List

.25

translucent 2 4" Slide Pointer, (d) 6804 2 1/4 white enamel .25

G-C VACUUM CLEANER BELTS



Dealers and servicemen earn extra money by selling belts. Display in your store for "over the counter sales." Best grade live rubber belts marked for identification. Popular belt ussortments on displays.

Nο 1010-D Asst. 12 Belts, Most Popular \$2.80 2.70 Asst. 12 Popular Flat Belts Asst. 12 Popular Round Belts 7010-0 3.00

(Individual belts available - see your Distributor)

G-C HUB CAP STATIC SPRINGS

Eliminate wheel static noise developed by poor electrical contact between front axle and wheels. Springs have riveted metal points for firm, smooth contact. Plated.

1058 Each Box, 24 Springs \$0.12 2.75



G-C TWEEZERS AND KIT

For the shop or laboratory to pick up and examine small parts, start screws and nuts, to get in hard-to-get spots, stringing dial cord, fastening springs,

No. Tweezer Kit, beautiful leatherette case and one each tweezers described below. \$3.25
7946° 6½° Self-closing tweezer. Opens when squeezed. Serrated, blunt points with with Opens when squeezed, Seriated, 0.80
7947' 84' Heavy duty type with
slide lock feature. Holds wires or
parts tight like an extra finger.
Serrated, blunt points. 1.20
7948' 44' Precision Tweezer. Narrow pointed ends for delicate work.
0.55

*Standard Jobber's quantity: 12 tweezers on display card — Add suffix 'D'



G-C TOOL HANDLE INSULATING TUBES

new idea for insulating your A new idea for insulating your handle tools. A supply of special insulating tubing in assorted sizes is included in kit to insulate all types of handles on pliers, cutters, screw driver blades, etc. You simply soak the tubing for a few minutes in G-C Service Solvent and the tubing will swell. Slip it over the handles and allow it to dry. It will shrink on drying and give it a professional appearance. (G-C Service Solvent is not included in kit.) is not included in kit.)

No. List 8118-E Env. Asstd. Tubing \$0.40 8118-D Display of 20 Env. 8.00



CEMENT WRENCH KITS-TOOL SETS-BUSHINGS





G-C SHAFT COUPLINGS, EXTENSIONS AND REDUCERS

	BRASS FITTINGS		§	INSULATED FITTINGS	
No.		List	No.		List
6701	1/4" to 1/4" coupling	\$0.25	6721	14" to 14" coupling	\$0.25
6702	14" to 34" coupling	.30	6722	14" to 14" coupling	.30
6703		.25	6723	4" to 3/16" coupling.	.25
6704	%" to %" coupling	.30	6724	%" to 3/16" coupling	.30
6705	14" hole to 14" shaft ex-		6725	14" hole to 14" shaft ex-	
	tension	.30		tension	.30
6709	%" hole to %" shaft ex-		6731	34" hole to 38" shaft ex-	
	tension and increaser	.30		tension and increaser	.30
67 I 0	%" hole to 1/4" shaft ex-		6732	3/4" hole to 1/4" shaft ex-	
	tension and reducer	.30		tension and reducer	.30
6711	3%" hole to 3%" shaft ex-		6733	%" hole to %" shaft ex-	
	tension	.30		tension	.30
6712	"4" x 6" brass shaft	.20	6734	¼" x 6" fibre shaft	.30
6713	14" x 12" brass shaft	.35	6735		.55
6714	28" x 6" brass shaft	.35	6736	4" x 6" bakelite shaft	.60
6715	%" x 12" brass shaft	.60	6737	1/4" x 12" bakelite shaft.	1.00
6716	14". hole x 14" round shaft		6738	%" x 6" fibre shaft	.45
	x 4" long	.35	6739	%" x 12" fibre shaft	.80



G-C REDUCING BUSHINGS

For knobs and shafts. A split bushing that really works, Brass, Easy to use.

No.	List
6751-E 1/4" to 18" reduction	on,
8 in Env.	\$0.40
6751-G144 No. 6751	
(Gross)	6.50



G-C SHAFT EXTENSIONS

Popular 1/4" shaft extension with flat shaft for spring type push-on knobs.

No.		Llst
6755	1/4" x 4 1/2" Long	Flat
	Shaft Extension	\$0.35
6716	1/4" x 4 1/2" Long	Round
	Shaft Extension	.35



G-C BRASS AND INSULATED SPACERS AND BUSHINGS

Spacers and Bushings needed for insulating and spacing of parts. Needed on chassis, sub-panels, etc. Nο. Assortments
Hardware Lab. Jar 12 Assorted Spacers and Bushings 6617 Hardware Lan, Jar 12 Assorted Spacers and Bushings (6760-Env. 12 Asst. Ins. Spacers 15 Asst. Threaded Brass Bushings 6-32 thread, ¼" to ¾" lg. 15 Asst. Threaded Brass Bushings 8-32 thread, ¼" to ¾" lg. 6763 15 Asst. Inreaded 5.5.

6775-E Env. 12 ¼" x ¼" Ins. Spacers 6776-E Env. 8 ¼" x ¾" Ins. Spacers 6779-E Env. 6 ¾" x ¼" Ins. Spacers 6761-E Env. 12 Asst. Metal Spacers 6765-E Env. 10 ¼" x ¼" Metal Spacers 6765-E Env. 8 ¼" x ¾" Metal Spacers 6766-E Env. 8 ¼" x ¾" Metal Spacers 6766-E Env. 8 ¼" x ¾" Metal Spacers 6766-E Env. 8 ¼" x ¾" Metal Spacers 1.25 .40 .40

6769-E	Env.	6 % x 1	¼" Metal	Spacers			.40
	BR	ASS			INSU	LATED	
No.	0.D.	Length	List	No.	0.D.	Length	List
6765	1/4 "	1/4 "	\$0.04	6775	1/4 "	1/4 "	\$0.04
6766	1/4 "	3/8"	.05	6776	1/4 "	3/8 "	.05
6767	1/4 "	1/2 "	.05	6777	1/4 "	1/2 "	.05
6768	1/4"	3/4 "	.06	6778	1/4 "	8/4 "	.06
6769	3/8"	1/4"	.05	6779	3/8 "	1/4 "	.05
6770	3/8 " 3/4 "	1/2"	.06	6780	3/8 "	1/2"	.06
6771	3/ //	8/ 11	0.7	6791	8/ 11	8/ //	0.7

THREADED BRASS BUSHINGS

		Threa	d		1 .		Thread	d	
No.	0.D.	Size	Length	n List	No.	0.D.	Size	Lengt	h List
6785	1/4 "	6-32	1/4"	\$0.05	6790	3/4"	8-32	1/4"	
6786	1/4 "	6 - 32	3/8"	.07	6791	1/4"	8-32	3/8 "	07
6787	1/4 "	6 - 32	1/2"	.08	6792	1/4"	8-32	1/2"	.08
6789	1/4"	6-32	8/4"	.09	6793	1/4"	8.32	3/4 "	.09







G-C 8-PIECE

VEST POCKET SET



G-C ALLEN-HEX WRENCHES AND KITS

Essential key wrenches for every repair man. Made of special alloy steel properly hardened. Used on knobs, dials, phono needles, motors, pulleys, etc.

HEX KEY WRENCHES

No.		List
	Env. 4 Asstd.	
	Wrenches	\$0.40
5029-E	Kit 6 Asstd.	
	Wrenches in Leath	
5020 A	erette Case -E Env. 3 Hex Key	.75
3023-A	E Filv. 3 Hex Key	
	Wrenches for No	
	1/4" to 1/8 Set	:
	Screws	.40
5031	No. 4	.12
5032	No. 5	.12
5033	No. 8	.12
5034	No. 10	.12
5035	1/4 "	.12
5036	6""	.13
5037	(e) %	.13
5038	j."	.16
0000	16	.10

G-C ALLEN-BRISTO WRENCH KIT

No. 2 to 3/8" screws.

No.

5028

G-C BRISTO-SPLINE

type wrenches as used on phono needles, motors, pulleys, knobs, etc. Made of alloy steel, properly hardened.

No.		List
5069-E	Env. 4 Asetd. Wrenches	\$0.40
5070-E	Kit 6 Asstd. Wrenches in Leath-	
	erette Case	.75
5071	No. 4	.12
5071-A	No. 5	.12
5072	No. 6	.12
5073	No. 8	.12
5074	No. 10	.12
5075	1/4"	.12
5076	16"	.13
5077	3/8 **	.13
5078	7."	.16

Complete wrench kit for hex and spline type screws used in electronic field. Double snap button case of durable leatherette. Fit

WRENCHES AND KITS

Very popular "Bristo" or "Spline"

No.		List
5069-E	Env. 4 Asstd. Wrenches	\$0.40
5070-E	Kit 6 Asstd. Wrenches in Leath	
	erette Case	.75
5071	No. 4	.12
5071-A	No. 5	.12
5072	No. 6	.12
5073	No. 8	.12
5074	No. 10	.12
5075	Y4"	.12
5076	16"	.13
5077	3/8"	.13
5078	7,"	16

No

Handiest tool! Seven sockets. ¼", ½", ½", ½", ½", ½" hex; %" round knurled, ¼" square, complete with 4" L handle. Ball type socket assembly. Baked enamel box. 712

		200	
6	20	1/2/	
6		8)
7	-	-/1	

G-C WIRE STRIPPER

5-in-1 tool. Wire stripper, scraper, cutter, screwdriver, and wire winder all in one. Tempered steel, plated.

List \$0.40

\$1.60

Handle holds five sockets, sizes ¼", ½", ½", ½", ½", % ", and ½". Easily assembled. Tempered steel, plated. No 715

G-C 6-PIECE

SLIP-ON WRENCH SET

List

\$2.00

G-C FUSE PULLERS

For cariridge fuses. Heavy duty construction of high dielectric material.

No. 5525	Midget size, for fus	List.
5526	1/4" x 1/2" Large size, for fus	\$0.60
3326	1/2" x 1 1/2"	es 1.25



G-C ELECTRONIC HARDWARE LABORATORIES

Complete assortment of hardware. Rack contains several thousand essential electronic hardware items. Packed in clear jars with screw caps. Assortments as below: Free Steel Rackt

War.			Dealer's
No.		List	Net
6604	DeLuxe IIdwe. Laboratory, 40 jars, as in as-		
	sortments No. 6601 and 6602, as below	\$26.00	\$15.60*
6601	No. 1, 20 jar asst. 1 each jars G-C No.	•	
	6605 through 6624 (see hardware pages		
	U-140, U-141, U-142),	13.00	7.80*
6602	No. 2, 20 jar asst. 1 each jars G-C No.		
	6625 through 6644 (see hardware pages		
	U-140, U-141, U-142).	13.00	7.80*
	, / -	00	00

Copyright by U. C. P., Inc.

Dealer's Net .99*

List



CEMENT

Llst

\$7.50

\$5.00

TELEVISION ACCESSORIES

G-C UNIVERSAL MAST BRACKET

"The best on the market"



Permanent, easy to install and easy to adjust mast bracket that can be used on roofs, chimneys, walls, gables, and most anywhere. Masts 30 to 40 feet and up to 1 %" diameter can be assembled down and swung up into position. It's made of best grade of aircraft aluminum.

No.		
000	Universal	Bracket

G-C CHIMNEY MOUNT

"Made of Cast Aircraft Aluminum"
Here's a better quality bracket for better installations. One man can install this on any



n install this on any chimney. Only one piece to handle with this "Cast Bracket." It will hold masts up to 1 % " diameter."

It is supplied complete with 24 ft. of galvanized strapping and all necessary hardware. It will not rust and mar the appearance of the home. Brackets can also be flat

used for fla mounting, angle and gable mounting. 8001

Pair of brackets, complete with strapping and all hardware. S Pair of brackets only with lag \$7.50 8002 screws. No strapping. Straps and hardware only. 5.00

G-C CHIMNEY QUICK MOUNT

"Made of Steel-Heavily Plated-Won't Rust"



Here's a chimney bracket for the inexpensive installation that can be installed in a few minutes. Only one piece to handle with a minimum of loose parts. Heavy steel 1/8" thick heavily plated. Brackets will support masts

up to 1%" diameter. All straps and hardware included.

No. 8005

Chimney Quick Mo Straps and Hardware.

List

Mount with \$4.25

G-C CORNER AND FLAT MAST BRACKETS



Made of aircraft aluminum this bracket minum this bracket will support all sizes of masts ¾" to 1 ¾" diameter. They are easy to install, only two screws or bolts neccessary for each bracket. The brackets will make a peat attractive inseatly. neat, attractive in-stallation that your customer will be

customer will be proud of. Supplied complete with lag screws.

No.				
8002	Brackets,	per	pair	

NEW G-C POLYETHYLENE STAND-OFF INSULATORS G-C REGULAR STAND-OFF G-C MAST-STAND-OFF



Universal type, can be used for flat 300-ohm twin lead and RG-59V cables. Heavy gauge stand-offs made with genuine polyethylene insulator and Bethanized steel screw hooks that are rust-proof and weather-proof.

"Cath	Froot.	
No.	Length Screw Type	List
8027	3 1/2" Wood Screw	\$0.10
8028	5 1/2" Wood Screw	.13
8029	7 1/2" Wood Screw	.14
8030	12" Wood Screw	.25
8031	3 1/2" Machine Screw	,
	and Nuts	.12
8032	5 1/2" Machine Screw	7
	and Nuts	.15



This can be used for flat 300-ohm This can be used for flat 300-01m twin lead and RG-590 cables. It is made with genuine polyethylene insulators and with a quick adjustment strap to fit any size mast. One size will fit masts $\frac{34}{9}$ " to $1\frac{14}{9}$ ".

No. Length \$0.15 8033 3 1/2 " 8034

G-C SILICONE COMPOUND



A permanent water-proofing material for TV and FM lead con-nections. Eliminates electrical and signal leakage due to mois-ture film. Maintains stability of transmis-sion lines, ignition systems, etc. Non-corrosive and chemi-cally inert. Effective permanent watercally inert. Effective to 400° C. In tubes.

List 8100 1-oz. Dealer's Net, \$1.65



G-C CLEAR PICTURE 300-

OHM POLYETHYLENE

TWIN LINE

Very high grade approved genuine

300-ohm polyethylene twin line spe-

cially made or Television and FM work. It is made of brown poly-

ethylene with 2 stranded wires. One

tinned and one copper wire makes it

Quantity

50-ft. Coil

100-ft. Coil

1000-ft. Spool



NEW G-C TELEVISION SAF-T-RACK

"Makes it easy to work with"

Here's a very simple and sturdy rack to use in repairing the heavy television chassis. Simply set it on the rack and tilt it on the side. The sturdy hooks will hold the chassis on its side so you can work on the set. It will prevent damage to the tube and make it easy to work on it. Every shop needs several of these G-C Saf-T-Racks.

\$2.50 4.50 No. 42.00 8045

List

Saf-T-Rack



NEW G-C TELEVISION ALIGNMENT KIT

A new kit with new tools specially designed for adjusting and aligning Television Receivers.

Tools

No. List 8050 Television Alignment Kit \$8.75

G-C 300-OHM FIBRE HEAD WIRING NAILS

These nails are specially made for nailing down 300-ohm twin line on wood work, along base boards, rafters, etc. They make installa-tion easy.

No. 1 ist 8020-E Env., 30 \$0.40 8020-D Display, 20 Env. 8.00 8020-G 144 1.25 8020-M 1000 8.50



easy to trace lines.

No.

8040

8042

8043







List

\$3.95





G-C CHIMNEY & MAST HOOK

Cadmium-plated steel hook, same as used for chimney straps and masts. Hook is welded for extra and masts. I welded for strength. Supplied with nut.

No. 8049-E Env.,2 \$0.40 8049-D X Display, 20 Env. 8.00 8049-G 144 20.00

G-C CHIMNEY STRAP

Galvanized annealed strap with 1/4" punch-ed holes. This is the same as used on chimney brackets. This strap is extra strong and yet very flexible to handle.

No. Coil 1_ist 8051 12-ft. 8052 100-ft. \$0.75 6.25

G-C FLOATING **GUY RING**

Galvanized guy washer for supporting masts. Will fit ¾" mast and 1" masts. Allows mast to be turned.

List 8055-E Env., 3 \$0.40 8055-G 144 15.00 8058 4 ½" 1 .25

G-C TURNBUCKLES

Extra strong cadmium-plated turnbuckles for guy wires and cables make it easy to install tall masts and towers.

Length No. Clsd. Qun. List 8056-E 3" 2 \$0.40 8057-E 3 ½" 2 .40 8058 3 ½" 1 .25

G-C MAST STRAPS

Made of galvanized steel these straps are used for fastening masts, poles to walls, roofs, chimneys, etc.

8130 Each \$0.06 8130-G Box,144 8.00

G-C U BOLT

For mounting and extending antenna poles and masts. Ideal for strapping 2 masts together or for fastening masts to buildings, plates, etc. Made of rust-proof Bethanized steel. Supplied

8123

\$0.30



CEMENT

TELEVISION ACCESSORIES













G-C 1/4-20 BOLTS

Round head, steel, cadmium-plated. 144 to Box

Length List 7144-G ½" \$2.65 8061-G ¾" 3.25 8062-G 1" 3.70 7145-G 1¼" 4.00 7146-G 2½" 6.90

1000 to Box

7144-M ½" 15.95 8061-M ¾" 19.50 8062-M 1" 22.20 7145-M 1¼" 24.20 7146-M 2½" 41.25

G-C 1/4-20 NUTS

Steel - cadmium-

No. Square Nuts List 8063-E Env., 25 \$0.40 8063-D Display, 20 Envs. 8.00

8063-G Box,144 2.15

Hexagon Nuts 7235-E Env., 25 \$0.40 7235-D Display, 20 Envs. 8.00

7235-G Box,144 2.35

G-C 1/4" LAG SCREWS

Steel, cadmium-plated lag screws specially made for Television Antenna, in-stallations and brack-

No. 13/4" Length List 8064-E Env., 4 \$0.40 8064-D Display, 20 Envs. 8.00

20 Envs. 8.00 8064-GBx.,14413.50 2" Length 8065-E Env.,4 .40 8065-D Display,

20 Envs. 8.00 8065-G Bx..14413.50

G-C WOOD **SCREWS**

Round head steel, cadmium - plated screws, for Television

screws, for Television work.

No. #8x11/4" Lg. List
8071-E Env.,15\$0.40
8071-G Bx.,144 3.05
#10x11/2" Long
8073-E Env.,12 .40
8073-G Bx.,144 4.05
12x11/2" Long
8075-E Env.,10 .40
8075-G Bx.,144 4.80
14x13/4" Long
8076-E Env.,8 .40
8076-G Bx.,144 6.80

G-C SCREW EYES

Steel, cadmium-nlated screw eyes for Television Antenna installations: for fastening guy wires, etc

8078-E Envlo. \$0.40 8078-D Display, 20 Envs. 8.00

8078-G Bx.,144 4.90

G-C GUY WIRE CLAMPS

The neatest, quickest way for fastening ends of guy wire cables on towers and masts. Easily adjusted with a screw driver. Galvanized steel.

No. Wire Size List













G-C DRIV-IN **ANCHORS**

These Driv-Ins are easy to use and are very handy for fastening masts and brackets to masonry and concrete. They carry the load. Will fit 1/4"

8083-E Env.,2 \$0.40 8083-D Display, 20 Envs. 8.00 8083-GBx.,14420.00

G-C LEAD ANCHORS

ANCHORS

Very popular lead anchors for wood screws; will fit ¼" and ½" holes and will take #10, 12, and 14 wood screws. No. 1" Long List 8084-E Env.,3 \$0.40 8084-D Display, 20 Envs. 8.00 8084-G Bx.,14412.50 1½" Long 8085-E Env.,2 40 8085-D Display, 20 Envs. 8.00

20 Envs. 8.00 8085-G Bx.,14417.50

G-C LAG SCREW - EXPANSION SHIELD

Will fit ¼" lag screws. Made of spe-cial alloy, 100% rust-proof (supplied rust-proof (supplied without lag screws). Used for Television Masts and Brackets, and other work. The shield is 1" long x ½" O.D. ½" drill is required.

8088 Env. 12 \$3.00 8088-G Bx.,14432.00 8088

G-C LADDER HOOKS

Every service man needs a hook ladder when installing Television antennas. Make your own hook ladder by fastening these hooks to your ladder. Sold in pairs, com-plete with bolts for easy installation.

No. 8215 Hooks, per pair \$5.00

G-C SOLDERLESS CONNECTOR KIT

For Television Antenna, Radio and Electrical Work
Complete kit of terminals and a bandy tool to install solder-less tampingles on and a less terminals on ends of wire. Handy for in-door and outdoor use, as it eliminates sol-dering.

No. List 8175 Complete Kit \$9.95 8176 Tool Only 6.60

G-C 300-OHM CONNECTOR

A handy connector to splice 300-ohm twin line. Easy to use. Retains characteristics of wire and makes a secure connection.

8095-E Env.,2 \$0.40 8095-D Display, 20 Envs. 8.00















G-C CARBIDE-TIPPED MASON-RY DRILL

Drill is earbide-tipped and has a spiral fluted body. It makes holes easily and accurately in the hardest mason-

No. 1/4 " 5 " 18 " 1/2 " \$3.75 4.00 4.75 8096 8097 8098 8099 6.00

G-C 300-OHM LINE **PROTECTIVE** PLASTIC TUBING

Clear plastic tubing to fit over the 300-ohm twin line and onm twin line and protect the wire from grounding and rub-bing on corners of buildings, eaves, etc. Used for lead in protection also. No. List 625 Box, 8 ft. \$0.95

G-C GROUND CLAMPS

Popular C type clamp will fit pipes up to 1 %" diameter. Makes a secure ground.

No. List 8120 \$0.25 Popular strap type ground will fit pipes %" to 2".

8121

G-C SPEEDEX STRIPPER

for the 300-ohm Twin Cable

Makes stripping of the 300-ohm cable very simple and easy. Just squeeze the handles and the job is done. No. Model List 733-H Regular \$6.00 744-H Automat. 8.00 (For other size

Speedex Strippers, see Page U-98)

G-C TELEVISION GUY WIRE

High grade galvanized steel twisted Television guy wire for tall masts and towers. Extra strength steel completely galvanized to prevent rust and corrosion. Available in 2 sizes that will take care of most requirements.

Four Strands No. 20 Wire (approx. 32" diam.)

No. 8107-C 100-ft. Coil 1000-ft. Coil 8107-M Six Strands No. 20 Wire (approx. 1/4" diam.) No List 8109-C 8109-M 100-ft. Coil 1000-ft. Coil











G.C POPULAR KNOB **ASSORTMENTS**

No. List 35 of all Types Popular Knobs 1120 85 Asstd. \$1.67 25 of all Asstd. Set Screw Knobs Only 1149 25 Asstd. 1.67 60 Auto Push-Button Knob Assortment 8026 60 Asstd. 1.67

G-C AUTO RADIO SHEET METAL SCREWS

Special short sheet metal screws such as used on auto radio chassis covers, etc. No. 8 x ¼ self-tapping hex head slotted. Steel, cad-nium-plated. List 8102-E Env., 30 \$0.40 8102-D Display, 20 Envs. 8.00

8102-GBx.,144 1.75

G-C PLASTIC STOCK
BOXES AND TRAYS
Clear polystyrene
loves for stocking
small parts, screws,
nuts, bolts, condensers, resistors, etc. See
what you have in
clear plastic boxes.
Boxes supplied with
covers. covers.

No. Depth List 8022 4x4x3" \$0.55 8023 4x8x3" 1.10

G-C PHONO DRIVES: Admiral, Crescent Made of best grade of

pure rubber, genuine replacement drives.

No. List 24-E Env., 1; Crescent, 3 ¾ " O.D. \$0.40 24-AE Env., 1; Ad-miral, Crescent 3 ¼ " O.D. 40 24-BEEnv., 1; Admiral Part No. 406 Å13, 3 ¼ " O.D. 40

G-C LONG NOSE PLIERS

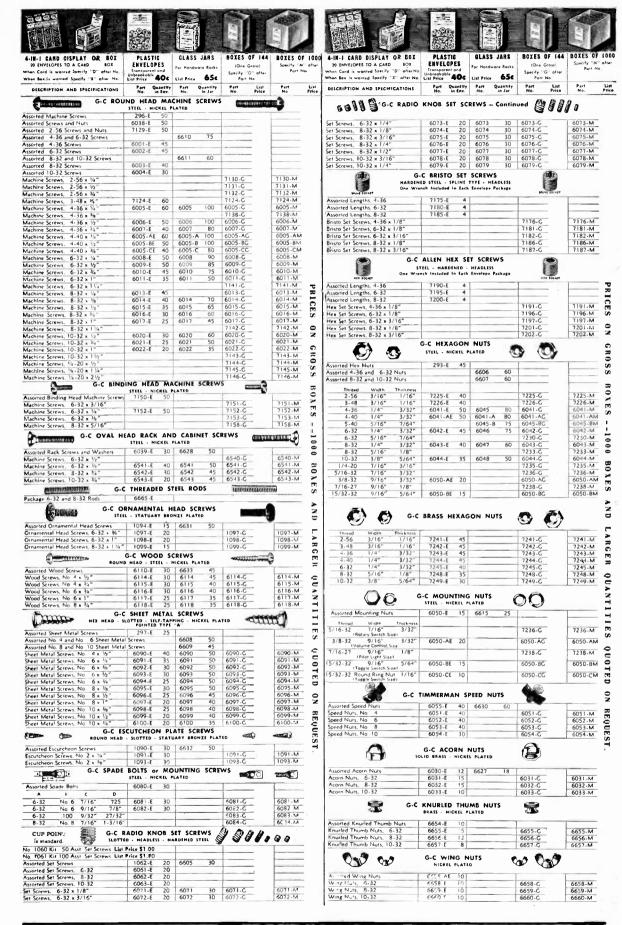
Very handy pliers to reach into places and hold parts. Ideal for installing radio dial cords. Available in straight nose and curved nose styles.

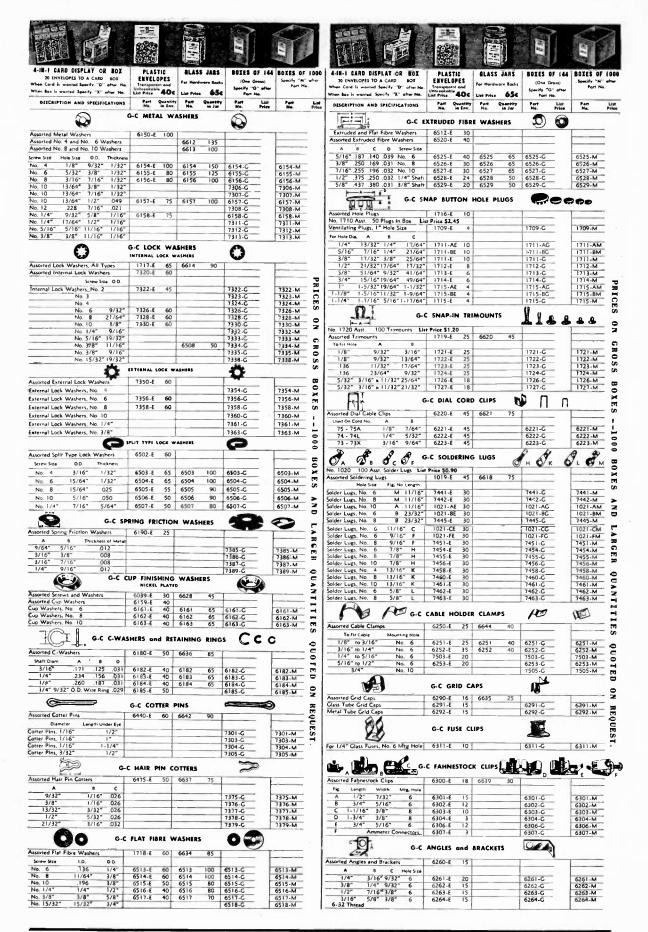
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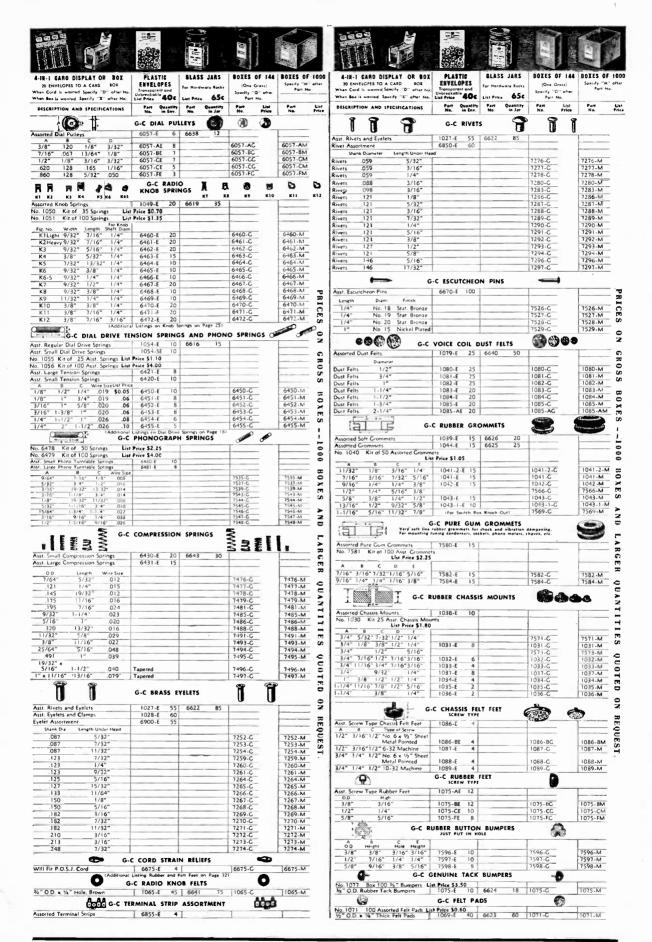
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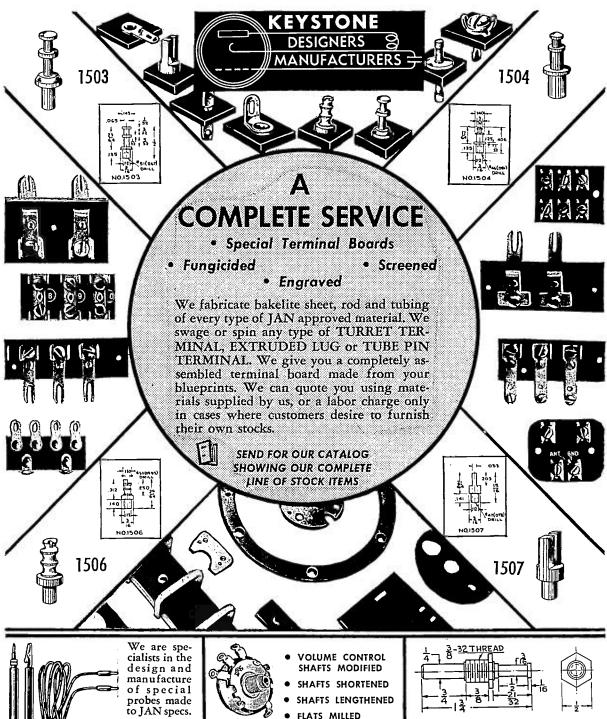
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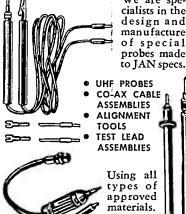
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