

## *Wire Termination*

Twist-On Wire Connectors	A-2
Wire Connector Accessories	A-10
Push-In Wire Connectors	A-11
Crimp Terminals & Splices	A-14
Terminal Strips	A-22
Crimp Connectors & Insulators	A-26
Set-Screw Wire Connectors	A-28
Mechanical Lugs	A-29

A

## *Wire Installation*

Fish Tapes	B-2
Fish Tape Accessories	B-6
Wire Pulling Lubricants	B-7
Accessories	B-11
Conduit Benders	B-12
Pulling Supplies	B-14

B

## *Tools and Totes*

Wire Strippers	C-2
Pliers	C-12
Cable Cutters	C-14
Crimp Tools	C-15
Screwdrivers	C-16
Miscellaneous Hand Tools	C-20
Insulated Hand Tools	C-22
Hole Saws	C-25
Drills & Bits	C-28
Reciprocating Blades	C-32
Tool Carriers	C-35

C

## *Wire Management*

Cable Ties	D-2
Heat Shrink	D-6
Heat Guns	D-8
Wire Markers	D-10
Lockout/Tagout Products	D-15
Safety Signs	D-28

D

## *Test and Measurement*

Digital Multimeters	E-2
Clamp Meters	E-12
Ground Resistance Meters	E-16
Insulation & Earth Testers	E-17
Power Quality Meters	E-18
Circuit Analyzers	E-21
Circuit Breaker Finders	E-22
Voltage/Continuity Testers	E-24
Electrical Testers	E-26
Accessories	E-30

E

## *DataComm Equipment*

Certification Testers	F-2
LAN Cable Testers	F-5
Testers	F-7
Hand Tools	F-10
Crimp Tools & Die Sets	F-13
Tool & Connector Kits	F-17
Accessories	F-22
Coaxial Connectors	F-24

F

## *Supplies*

Commutator Maintenance Products	G-2
Plastic Anchors	G-9

G

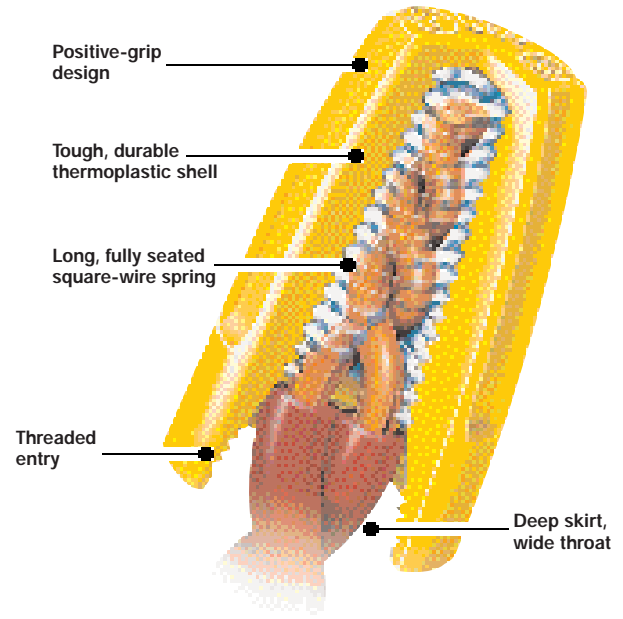
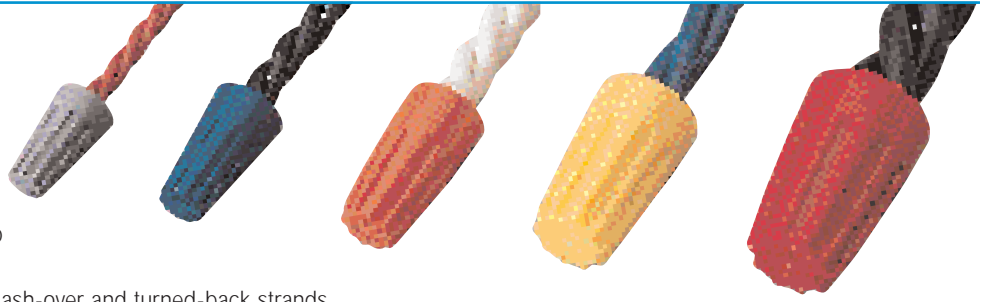
A

*Wire Termination*

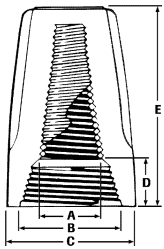


## Wire-Nut® Wire Connectors

- Five color-coded models cover a full range of wire sizes from 22 - 8 AWG
- Fixed, square-wire spring creates its own threads — maintains a secure positive grip that will not relax over time
- No pre-twisting required — positive grip design provides fast, easy installation
- Deep, wide skirt helps protect against flash-over and turned-back strands for maximum dielectric protection
- Reusable for easy circuit changes and additions
- Tough, UL94V-2 flame-retardant shell rated at 105°C (221°F)
- UL 486C Listed and CSA 22.2 #188 Certified; comply with Federal Specification W-S-610E
- Classified in accordance with IEC Publications 998-2 and 998-2-4



Dimensions (Inches/mm)



Model	A	B	C	D	E
71B*	11/64 4.5	1/4 6.5	21/64 8	11/64 4.5	37/64 15
72B*	11/64 4.5	5/16 8	25/64 10	3/16 5	45/64 18
73B*	11/64 4.5	11/32 9	7/16 11	11/32 9	55/64 22
74B*	17/64 7	7/16 11	35/64 14	5/16 8	61/64 24
76B*	9/32 7	1/2 13	19/32 15	3/8 10	1-1/16 27

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
71B*	Gray	300V No. 22 to 16 AWG Min. 2 No. 22 – Max. 2 No. 16	300V .64mm DIA to 1.29mm DIA Min. .65mm <sup>2</sup> – Max. 2.62mm <sup>2</sup>	Box of 100	30-071
				Carton of 1,000	30-171
				Keg of 25,000 (loose pack)	30-271
72B*	Blue	300V No. 22 to 14 AWG Min. 2 No. 22 – Max. 3 No. 16	300V .64mm DIA to 1.63mm DIA Min. .65mm <sup>2</sup> – Max. 3.93mm <sup>2</sup>	Box of 100	30-072
				Carton of 1,000	30-172
				Keg of 10,000 (loose pack)	30-272
73B*	Orange	600V* No. 22 to 14 AWG Min. 1 No. 18 & 1 No. 20 Max. 4 No. 16 & 1 No. 20	600V* .64mm DIA to 1.63mm DIA Min. 1.34mm <sup>2</sup> Max. 5.76mm <sup>2</sup>	Box of 100	30-073
				Jar of 300	30-073J
				Carton of 1,000	30-173
				Keg of 10,000 (20 bags, 500 ea.)	30-273
				Keg of 10,000 (loose pack)	30-673
74B*	Yellow	600V* No. 18 to 12 AWG Min. 2 No. 18 Max. 4 No. 14 & 1 No. 18	600V* 1.02mm DIA to 2.05mm DIA Min. 1.64mm <sup>2</sup> Max. 9.14mm <sup>2</sup>	Box of 100	30-074
				Jar of 175	30-074J
				Carton of 1,000	30-174
				Keg of 10,000 (20 bags, 500 ea.)	30-274
76B*	Red	600V* No. 18 to 10 AWG Min. 2 No. 14 Max. 2 No. 10 & 2 No. 12	600V* 1.02mm DIA to 2.59mm DIA Min. 4.16mm <sup>2</sup> Max. 17.14mm <sup>2</sup>	Box of 100	30-076
				Carton of 1,000	30-176
				Keg of 5,000 (20 bags, 250 ea.)	30-276

\*1,000V maximum in fixtures and signs

## High Temperature Wire-Nut® Wire Connectors

All of the Wire-Nut® Wire Connector features plus:

- Black, thermoplastic shell specially designed to withstand the extreme heat build-up commonly found in high-wattage light fixtures and signs. UL Listed to 150°C (302°F)
- Four models to cover wire ranges from 22 through 12 AWG



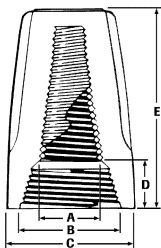
Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
71B®	Black	300V No. 22 to 16 AWG Min. 2 No. 22 Str Max. 2 No. 16	300V .64mm DIA to 1.29mm DIA Min. .65mm <sup>2</sup> Max. 2.62mm <sup>2</sup>	Carton of 1,000	30-151
				Keg of 25,000 (loose pack)	30-251
72B®	Black	300V No. 22 to 14 AWG Min. 2 No. 22 Max. 3 No. 16	300V .64mm DIA to 1.63mm DIA Min. .65mm <sup>2</sup> Max. 3.93mm <sup>2</sup>	Carton of 1,000	30-152
				Keg of 10,000 (loose pack)	30-252
73B®	Black	600V* No. 22 to 14 AWG Min. 1 No. 18 w/1 No. 20 Max. 4 No. 16 & 1 No. 20	600V* .64mm DIA to 1.63mm DIA Min. 1.34mm <sup>2</sup> Max. 5.76mm <sup>2</sup>	Carton of 1,000	30-153
				Keg of 10,000 (loose pack)	30-253
59B™	Black	600V* No. 22 to 12 AWG Min. 2 No. 20 Max. 3 No. 14	600V* .64mm DIA to 2.05mm DIA Min. 1.04mm <sup>2</sup> Max. 6.24mm <sup>2</sup>	Box of 100	30-059
				Carton of 1,000	30-159
				Keg of 5,000 (loose pack)	30-259

\*1,000V maximum in fixtures and signs



Wire Connectors

### Dimensions (Inches/mm)

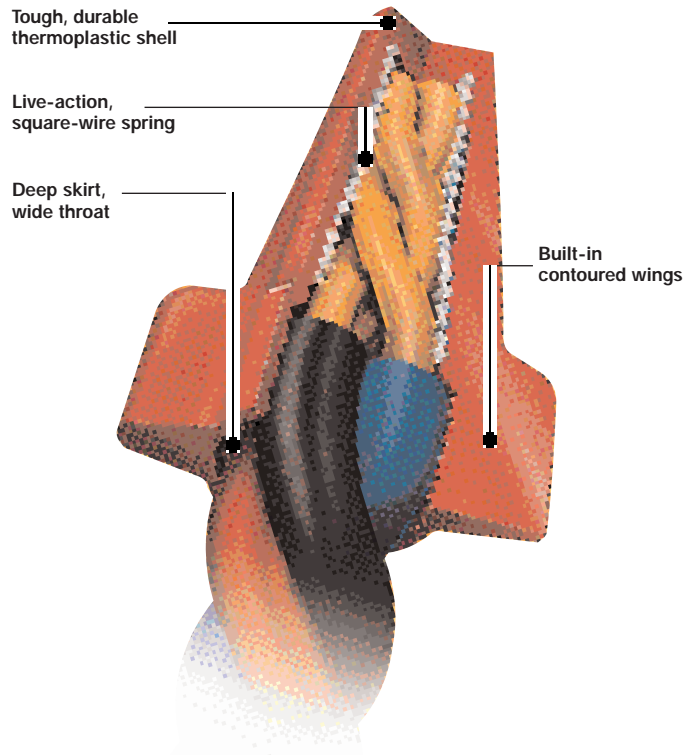
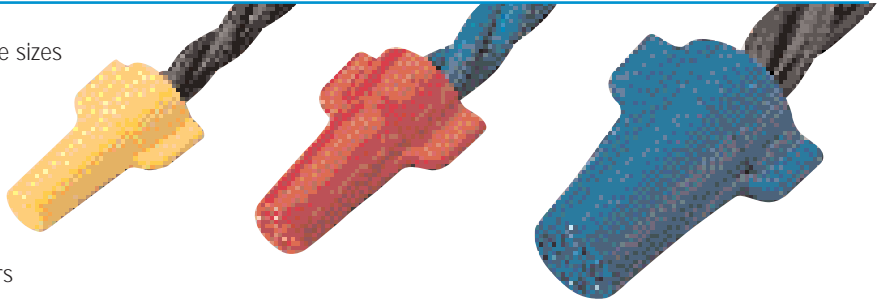


Model	A	B	C	D	E
71B®	5/32	1/4	21/64	13/64	37/64
Black	4	6.5	8	5	15
72B®	13/64	5/16	25/64	15/64	45/64
Black	5	8	10	6	18
73B®	13/64	23/64	7/16	3/8	55/64
Black	5	9	11	9.5	22
59B™	13/64	13/32	31/64	37/64	1-1/16
Black	5	10	12	14.5	27

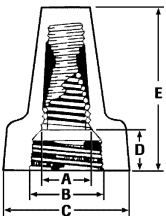


## Wing-Nut® Wire Connectors

- Three color-coded models cover a full range of wire sizes from 18 through 6 AWG
- Specially designed contoured wings provide a secure grip for extra leverage on maximum wire combinations
- Live-action spring expands to accept wire shape and size with no pre-twisting required
- Square-wire spring threads directly onto conductors for fast, secure connections
- Deep skirt helps protect against flash-over and turned-back strands for maximum dielectric protection
- Easily removed for repeat usage on same size or larger wire combinations
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- UL 486C Listed and CSA 22.2 #188 Certified; comply with Federal Specification W-S-610E
- Classified in accordance with IEC Publications 998-2 and 998-2-4



Dimensions (Inches/mm)



Model	A	B	C	D	E
451°	15/64 6	11/32 9	11/16 18	5/16 8	1-1/64 26
452°	21/64 8.5	15/32 12	15/16 24	5/16 8	1-15/64 31.5
454°	7/16 11	5/8 16	1-3/16 30	13/32 10.5	1-15/32 37.5
92°	21/64 8.5	13/32 10.5	29/32 23	9/32 10	1-5/32 30

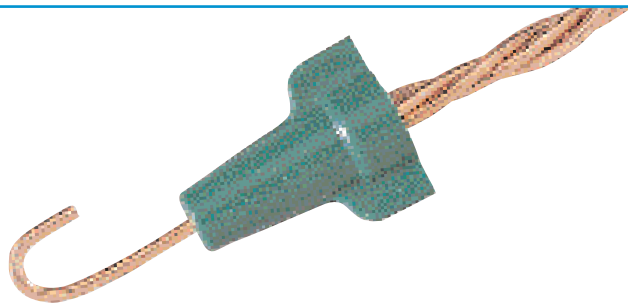
Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
451°	Yellow	600V* No. 18 thru 10 AWG Min. 2 No. 18 Max. 3 No. 12	600V* 1.02mm DIA to 2.59mm DIA Min. 1.64mm <sup>2</sup> Max. 9.93mm <sup>2</sup>	Box of 100	30-451
				Jar of 225	30-451J
				Carton of 1,000	30-551
				Keg of 10,000 (20 bags, 500 ea.)	30-651
452°	Red	600V* No. 18 thru 8 AWG Min. 2 No. 18 Max. 5 No. 12	600V* 1.02mm DIA to 3.26mm DIA Min. 4.16 mm <sup>2</sup> Max. 16.55 mm <sup>2</sup>	Box of 100	30-452
				Jar of 300	30-452J
				Carton of 1,000	30-552
				Keg of 5,000 (10 bags, 500 ea.)	30-652
454°	Blue	600V* No. 14 thru 6 AWG Min. 3 No. 12 Max. 2 No. 6 & 1 No. 12	600V* 1.63mm DIA to 4.12mm DIA Min. 9.93mm <sup>2</sup> Max. 29.9mm <sup>2</sup>	Box of 50	30-454
				Keg of 2,500 (25 bags, 100 ea.)	30-654

\*1,000V maximum in fixtures and signs



## Greenie® Grounding Connector

- Designed for making ground connections and bonding non-metallic sheathed cable
- Contoured wings for maximum leverage
- Live-action, square-wire spring provides superior grounding connections
- Tough, UL 94V-2 flame-retardant shell
- UL 467 Listed and CSA 22.2 #188 Certified; complies with Federal Specification W-S-610E



Model	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
92®	No. 14 thru 10 AWG Min. 2 No. 14 Max. 3 No. 12 & 1 No. 14	1.63mm DIA to 2.59mm DIA Min. 4.16 mm <sup>2</sup> Max. 12.01 mm <sup>2</sup>	Box of 100	30-092
			Carton of 1,000	30-192
			Keg of 5,000 (10 bags, 500 ea.)	30-292



Greenie® Grounding Connector fully meets the intent of the N.E.C. and specifically aids in compliance with the following:

### ARTICLE 250: GROUNDING

- 250-74 Connecting Receptacle Grounding Terminal to Box
- 250-113 To Conductors and Equipment
- 250-114 Continuity and Attachment of Branch-Circuit Equipment Grounding Conductors to Boxes (b) Nonmetallic Boxes

### ARTICLE 370: OUTLET, SWITCH AND JUNCTION BOXES AND FITTINGS

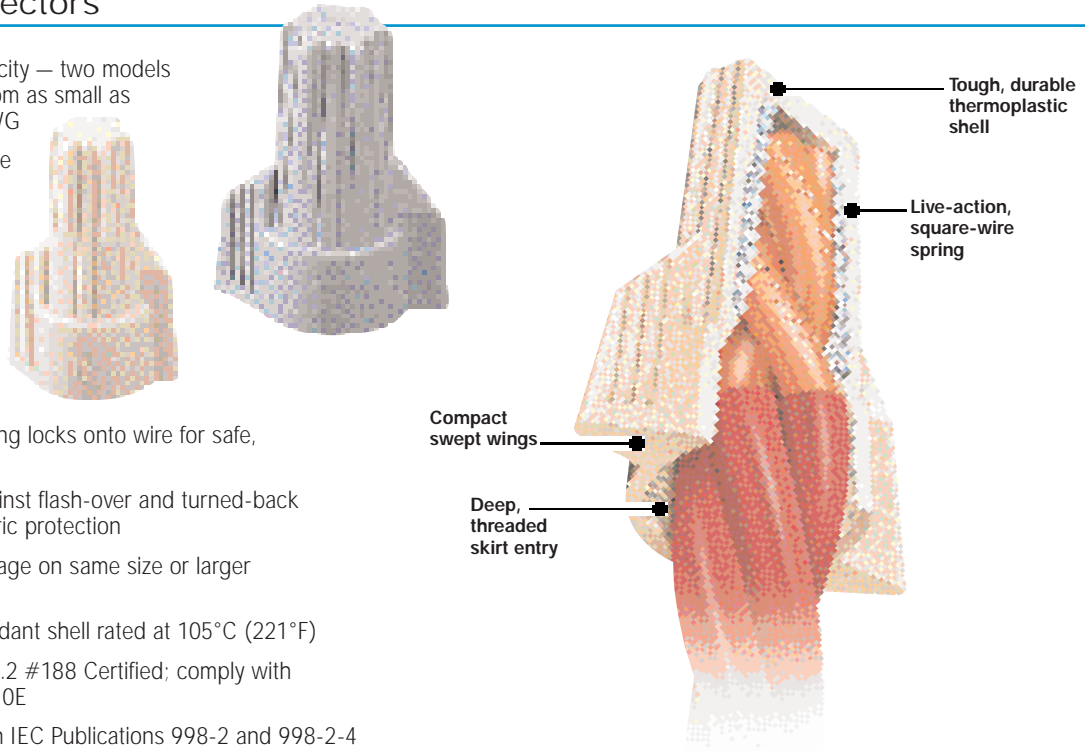
- 370-4 Metal Boxes

### ARTICLE 550: MOBILE HOMES AND PARKS

- 550-11 Grounding (b & c) (2) Equipment Grounding Means

## Twister® Wire Connectors

- Exceptional wire-range capacity – two models handle wire combinations from as small as 22 AWG to as large as 6 AWG
- Ribbed cap provides a secure grip and fast fingertip starts
- Swept wings offer extra leverage and less effort for large wire combinations
- Hexagonal shape accommodates standard nutdriver for tool installation
- Live-action, square-wire spring locks onto wire for safe, secure connections
- Deep skirt helps protect against flash-over and turned-back strands for maximum dielectric protection
- Easily removed for repeat usage on same size or larger wire combinations
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- UL 486C Listed and CSA 22.2 #188 Certified; comply with Federal Specification W-S-610E
- Classified in accordance with IEC Publications 998-2 and 998-2-4



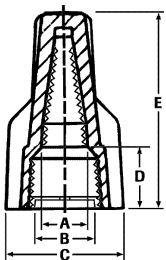
Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
341°	Tan	600V* No. 22 thru 8 AWG Min. 3 No. 22 Max. 3 No. 10	600V* .64mm DIA to 3.26mm DIA Min. .97mm <sup>2</sup> Max. 15.78mm <sup>2</sup>	Box of 50	30-141
				Box of 100	30-341
				Jar of 750	30-341J
				Bag of 500	30-641
				Carton of 1,000	30-541
342°	Gray	600V* No. 18 thru 8 AWG Min. 3 No. 14 Max 2 No. 10 w/4 No. 12 Solid	600V* 1.02mm DIA to 3.26mm DIA Min. 6.24mm <sup>2</sup> Max. 23.76mm <sup>2</sup>	Box of 25	30-142
				Box of 50	30-342
				Bag of 250	30-642

\*1,000V maximum in fixtures and signs



Combination	3#22	3#14	3#10	2#10 w/4#12
Cir Mil Area	1,920 (.97mm <sup>2</sup> )	12,330 (6.24mm <sup>2</sup> )	31,140 (15.78mm <sup>2</sup> )	46,880 (23.76mm <sup>2</sup> )
341°				
342°				

### Dimensions (Inches/mm)



Model	A	B	C	D	E
341° Tan	17/64 7	29/64 11.5	23/32 18	23/64 9	1-1/8 28.5
342° Gray	3/8 9.5	9/16 20	1.0 25.5	13/32 10.5	1-19/64 33

## Twister PRO Wire Connector

- SureGrip™ overmolding provides better grip for improved leverage and more torque
- Comfortable swept wings designed to help reduce hand fatigue
- Expanding square-wire spring provides a secure connection every time
- Better grip and more leverage for faster connections with less effort



Molded vertical grooves provide maximum grip

Patented swept-wing SureGrip™ design

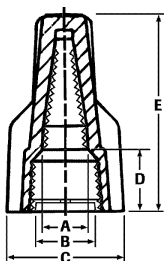
Exceptional wire range and capacity  
 - Min. 2 #18 AWG  
 - Max. 4 #10 AWG

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
344	Red/Gray	600V* No. 22 to 8 AWG Min. 2 No. 18 Max. 4 No. 10	600V* .64mm DIA to 3.26mm DIA Min. 1.64mm <sup>2</sup> Max. 21mm <sup>2</sup>	Tube of 25	30-144J
				Jar of 250	30-244J
				Jar of 500	30-644J

\*1,000V maximum in fixtures and signs



Combination	Min. 2 #18	4 #14	5 #12	Max. 4 #10
344*				

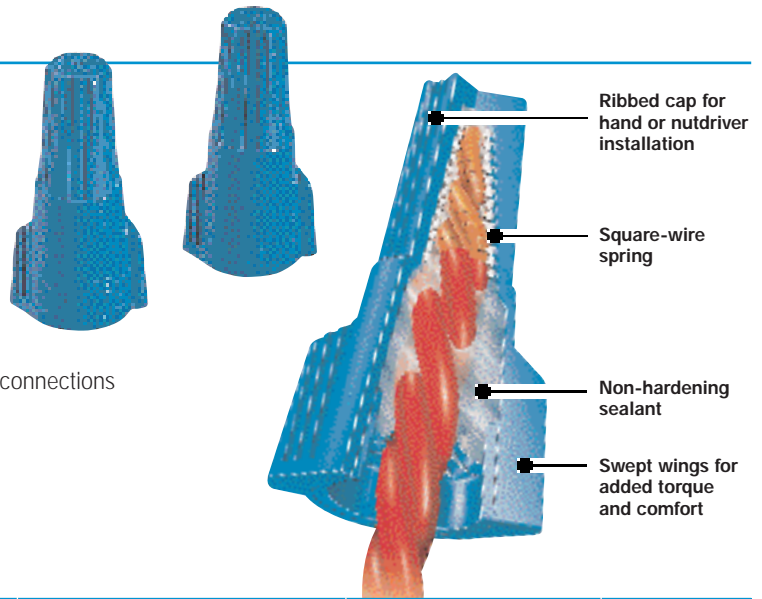


Dimensions (Inches/mm)

Model	A	B	C	D	E
344 Red/Gray	11/32 8.8	1/2 12.7	15/16 23.5	7/16 10.7	1-1/4 31.8

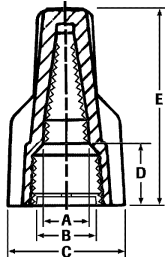
## Twister® DB Plus™ Wire Connector

- Smallest wet location/direct burial connector with widest wire range — covers wire sizes from 20 AWG through 12 AWG
- Non-hardening sealant completely seals out moisture to protect conductors from fungus and corrosion — remains stable from -40°C (-40°F) to 105°C (221°F)
- Compact, one-piece design features ribbed cap, swept wings and hexagonal head for easy installation by hand or with standard nutdriver
- Live-action, square-wire spring locks onto wire for safe, secure connections
- Deep skirt provides maximum dielectric strength
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- Certified for underground and wet locations — UL 486D Listed and CSA C22.2 #188.2 Certified; complies with Federal Specifications W-S-610E



Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
60	Blue	600V* No. 22 to 8 AWG Min. 1 No. 18 & 1 No. 20 Max. 1 No. 10 & 2 No. 12	600V* .64mm DIA to 3.26mm DIA Min. 1.34mm <sup>2</sup> Max. 11.88mm <sup>2</sup>	Card of 2	30-060
				Card of 10	30-760
				Card of 25	30-160
				Box of 100	30-260
				Carton of 1,000	30-360

\*1,000V maximum in fixtures and signs



Dimensions (Inches/mm)

Model	A	B	C	D	E
60	9/32 7.1	17/32 13.5	41/64 16.2	55/64 22	1-21/32 42

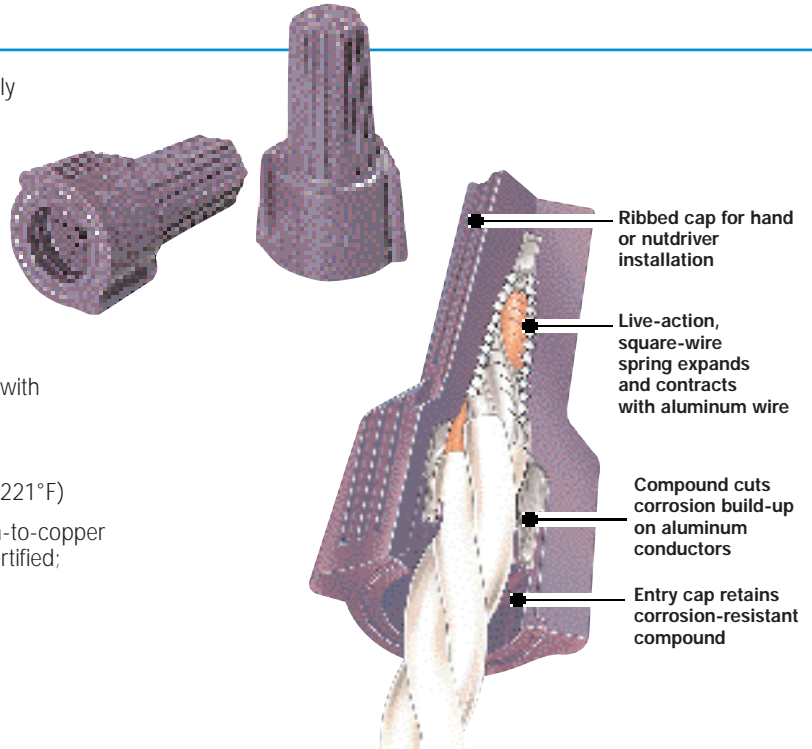
### WARNING:

1. One time use only. Do not reuse.
2. Wiring must comply with all applicable electrical codes.
3. Contact IDEAL for complete wire combination listing.



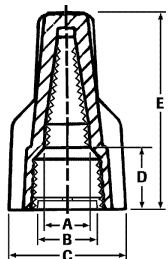
## Twister® Al/Cu Wire Connector

- Only aluminum-to-copper twist-on connector specifically designed to guarantee a secure connection while preventing aluminum corrosion
- Specially formulated corrosion-resistant compound cuts and penetrates corrosion build-up on aluminum conductors for increased conductivity and cooler connections
- Compact, one-piece design features ribbed cap, swept wings and hexagonal head for easy installation by hand or with standard nutdriver
- Live-action, square-wire spring expands and contracts with aluminum wire
- Deep skirt provides maximum dielectric strength
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- Complies with N.E.C. Section #110-14(b) for aluminum-to-copper connections; UL 486C Listed and CSA C22.2 #188 Certified; complies with Federal Specification W-S-610E
- UL 467 Listed for grounding and bonding



Model	Color	Wire Combinations	Quantity	Cat. No.
65	Purple	1 No. 10 Al solid w/1 or 2 No. 10 Cu solid 1 No. 10 Al w/1 or 2 No. 12 Cu 2 No. 10 Al solid w/1 No. 12 Cu 1 No. 10 Al w/1 or 2 No. 14 Cu 2 No. 10 Al solid w/1 No. 14 Cu 2 No. 12 Al solid w/1 No. 10 Cu 1 No. 12 Al solid w/1 or 2 No. 10 Cu	Card of 2	30-065
		1 No. 12 Al stranded w/1 or 2 No. 10 Cu solid 1 No. 12 Al w/1 or 2 No. 12 Cu 2 No. 12 Al solid w/1 No. 12 Cu 1 No. 12 Al w/1 or 2 No. 14 Cu 2 No. 12 Al solid w/1 No. 14 Cu 1 No. 10 Al w/1 or 2 No. 18 Cu 2 No. 10 Al solid w/1 No. 18 Cu 1 No. 12 Al w/1 or 2 No. 16 Cu 2 No. 12 Al solid w/1 No. 16 Cu 1 No. 10 Al w/1 or 2 No. 16 Cu 2 No. 10 Al solid w/1 No. 16 Cu 1 No. 12 Al w/1 or 2 No. 18 Cu 2 No. 12 Al solid w/1 No. 18 Cu	Card of 10 Card of 25 Box of 100 Carton of 1,000	30-765 30-165 30-265 30-365

600V maximum building wire; 1,000V signs or lighting fixtures



Dimensions (Inches/mm)

Model	A	B	C	D	E
65	$\frac{17}{64}$ 7	$\frac{13}{32}$ 10.5	$\frac{13}{16}$ 21	$\frac{35}{64}$ 14	$\frac{1-11}{32}$ 34

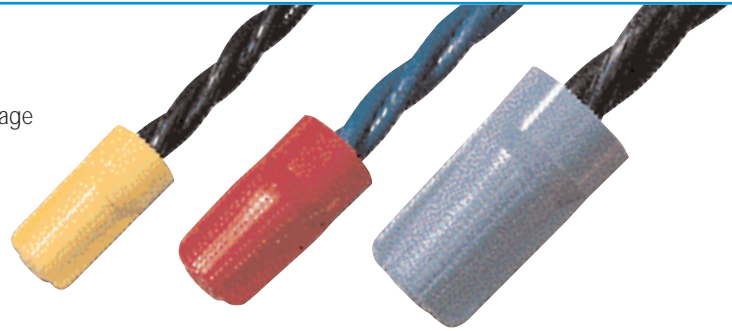
**WARNING:**

1. One time use only. Do not reuse. Not to be used when connecting only aluminum conductors.
2. Wiring must comply with all applicable electrical codes.
3. Contact IDEAL for complete wire combination listing.



## Buchanan Construction Products B-CAP® Wire Connectors

- Three color-coded models cover a full range of wire sizes from 22 through 6 AWG
- Contoured Classic Fins™ provide a secure grip for extra leverage on maximum wire combinations
- Live-action spring expands to accept wire shape and size with no pre-twisting required
- Square-wire spring threads directly onto conductors for fast, secure connections
- Deep skirt protects against flash-over and turned-back strands for maximum dielectric protection
- Easily removed for repeat usage on same size or larger wire combinations
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- UL 486C Listed and CSA 22.2 #188 certified; complies with Federal Specification W-S-610E
- Classified in accordance with IEC Publications 998-2 and 998-2-4



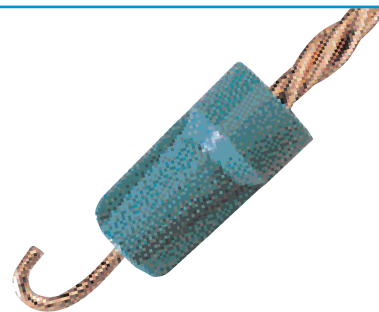
Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
B1	Yellow	600V* No. 22 thru 10 AWG Min. 2 No. 18 Max. 3 No. 12	600V* .635mm DIA to 2.59mm DIA Min. 1.64mm <sup>2</sup> Max. 9.93mm <sup>2</sup>	Box of 100	<b>B1-1</b>
				Jar of 250	<b>B1-250JR</b>
				Bucket of 2,500 (5 bags, 500 ea.)	<b>B1-25</b>
				Keg of 10,000 (20 bags, 500 ea.)	<b>B1-B</b>
B2	Red	600V* No. 22 thru 8 AWG Min. 2 No. 18 Max. 5 No. 12	600V* .635mm DIA to 3.26mm DIA Min. 1.64mm <sup>2</sup> Max. 16.55mm <sup>2</sup>	Box of 100	<b>B2-1</b>
				Jar of 350	<b>B2-350JR</b>
				Jar of 600	<b>B2-600JR</b>
				Bucket of 2,500 (5 bags, 500 ea.)	<b>B2-25</b>
B4	Blue-Gray	600V* No. 14 thru 6 AWG Min. 2 No. 12 Max. 2 No. 6	600V* 1.63mm DIA to 4.12mm DIA Min. 6.6mm <sup>2</sup> Max. 26.6mm <sup>2</sup>	Box of 50	<b>B4-1</b>
				Bucket of 1,000 (4 bags, 250 ea.)	<b>B4-25</b>
				Keg of 2,500 (10 bags, 250 ea.)	<b>B4-B</b>

\*1,000V maximum in fixtures and signs



## Buchanan Construction Products B-CAP® Green-B® Grounding Connector

- Designed for making ground connections and bonding non-metallic sheathed cable
- Live-action, square-wire spring provides superior grounding connections
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- UL 467 Listed and CSA 22.2 #188 Certified; complies with Federal Specification W-S-610E

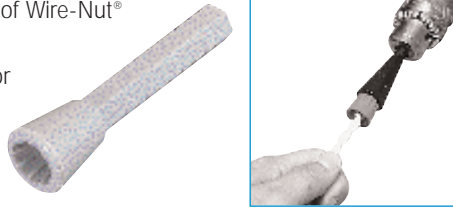


Model	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
BGR	No. 14 thru 10 AWG Min. 2 No. 14 Max. 5 No. 12	1.63mm DIA to 2.59mm DIA Min. 4.16mm <sup>2</sup> Max. 16.5mm <sup>2</sup>	Box of 50	<b>BGR-1</b>
			Bucket of 2,500 (10 bags, 250 ea.)	<b>BGR-25</b>
			Keg of 5,000 (20 bags, 250 ea.)	<b>BGR-B</b>



## Wire-Nut® Wire Connector Sockets

- Speeds installation of Wire-Nut® Wire Connectors
- Fit any pneumatic or electric tool with a 1/4 in. chuck or drive socket



For Connector Model	Cat. No.
71B®, 71B® Black, 72B® & 72B® Black	30-903
73B® & 73B® Black	30-904
59B™	30-905
74B®, 76B® & 59B™	30-906

## Wire-Nut® Wire Connector Wrench

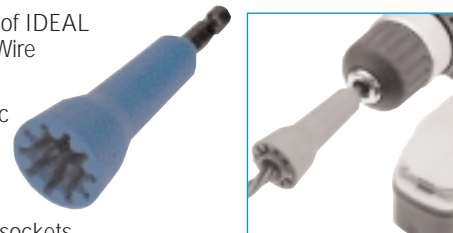
- Speeds installation of Wire-Nut® Wire Connectors
- Excellent leverage helps reduce fatigue



For Connector Model	Cat. No.
73B®, 74B® & 76B®	H-632

## Spin-Twist® Wire Connector Socket

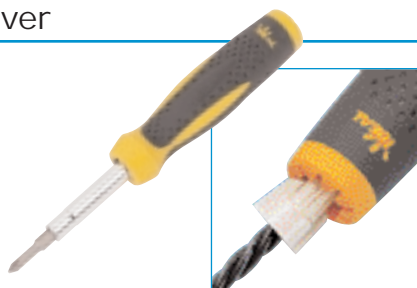
- Speeds installation of IDEAL and BUCHANAN Wire Connectors
- For use with electric corded or cordless drill drivers
- 1/4 in. chuck fits most drills or drive sockets



For Connector Model	Cat. No.
Wire-Nut®, Wing-Nut®, Twister®, B-CAP® and WingTwist™	30-902

## 7-in-1 Screwdriver

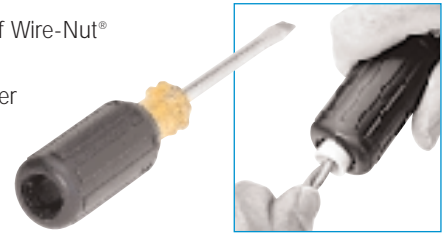
- Facilitate installation of connectors
- Universal Wire-Nut® Wrench in handle
- Accepts most twist-on connectors



For Connector Model	Cat. No.
7-in-1 Twist-a-Nut™	35-908

## Wire-Nut® Wire Connector Wrench/Screwdriver Combo

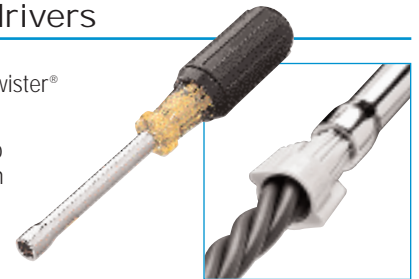
- Speeds installation of Wire-Nut® Wire Connectors
- Slotted-tip screwdriver with convenient connector-wrench socket in end of insulated handle



For Connector Model	Type	Cat. No.
74B® & 76B®	Mechanic – 1/4 in. x 4 in.	30-331
74B® & 76B®	Electrician – 3/16 in. x 6 in.	30-333

## Nutmaster® Nutdrivers

- Speeds installation of Twister® Wire Connectors
- Nickel/chrome plated to resist rust and corrosion
- Cushioned rubber grip



For Connector Model	Cat. No.
341°	35-292
342°	35-295

## Ratch Wrench

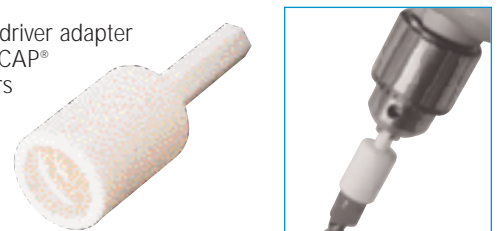
- Speeds installation of B-CAP® Wire Connectors
- Either end accepts 1/4-in. drive for tight-spot wire splicing



For Connector Model	Cat. No.
B1, B2 & B4	BR-5

## High-Speed Wire Connector Chuck

- Cordless screwdriver adapter for installing B-CAP® Wire Connectors



For Connector Model	Cat. No.
B1, B2 & B4	HSC-1



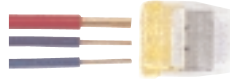
## In-Sure™ Push-In Wire Connectors

■ Accepts the following copper wire sizes

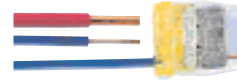
- Solid  
#20 AWG - #12 AWG solid
- Stranded  
#16 AWG - #14 AWG (stranding pattern 19 strand or less)  
#18 AWG (stranding pattern 7 strand or less)
- Stranded (tin bonded)  
#14 AWG - #12 AWG (stranding pattern 19 strand or less)  
#16 AWG (stranding pattern 26 strand or less)  
#18 AWG (stranding pattern 16 strand or less)

■ UL 467 Listed for grounding and bonding applications

1. Strip



2. Push



3. Connect



Model	Color	Ports	Length		Width		Height		Quantity	Cat. No.
			In.	mm	In.	mm	In.	mm		
84	Red	2	.355	9.02	.434	11.02	.729	18.52	Box of 100	30-084
									Jar of 300	30-084J
									Box of 1,000	30-184
									Box of 5,000	30-684
85	Orange	3	.355	9.02	.591	15.01	.729	18.52	Box of 100	30-085
									Jar of 250	30-085J
									Box of 1,000	30-185
									Box of 5,000	30-685
86	Yellow	4	.355	9.02	.748	18.99	.729	18.52	Box of 100	30-086
									Jar of 200	30-086J
									Box of 1,000	30-186
									Box of 5,000	30-686
87	Gray	5	.355	9.02	.907	23.03	.729	18.52	Box of 100	30-087
									Jar of 150	30-087J
									Box of 1,000	30-187
									Box of 5,000	30-687
88	Blue	6 Stacked	.607	15.42	.603	15.32	.729	18.52	Box of 50	30-088
									Jar of 100	30-088J
									Box of 1,000	30-188
									Box of 5,000	30-688
90	Black	8	.355	9.02	1.38	35.03	.717	18.21	Box of 50	30-090
									Jar of 100	30-090J
									Box of 1,000	30-190
									Box of 5,000	30-690



COPPER TO COPPER ONLY. Do not use on aluminum  
 Temperature rating: 105°C (221°F) maximum  
 600V maximum building wire, 1000V maximum signs or lighting fixtures



## In-Sure™ Push-In Wire Connectors

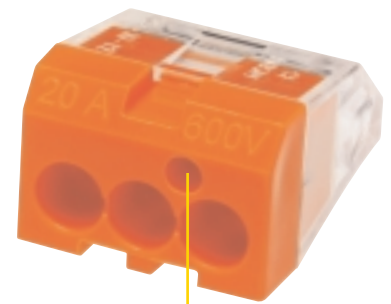
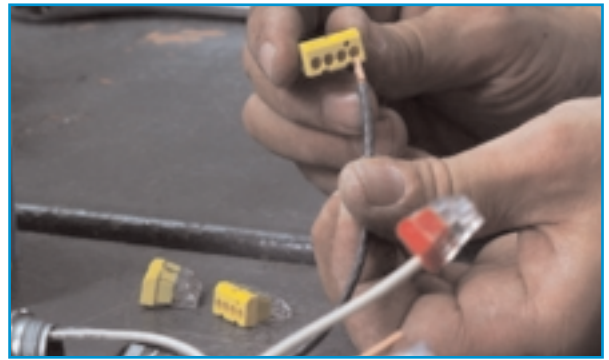
**NEW**



- **NOW** handles #12 AWG stranded wire combinations
- Specific wire listings
  - Solid: #12 AWG – #18 AWG
  - Stranded: #12 AWG (19 strand or less)
  - #14 AWG (19 strand or less)
  - #16 AWG (26 strand or less)
  - #18 AWG (16 strand or less)
- For use on insulation types AWM, TEW, TFN, TFFN, THHN, XHHW, T90 Nylon or equivalent.
- Perfect for residential, lighting retrofit, OEM lighting manufacturing, prefabricated wiring systems and other OEM and branch circuit wiring applications
- Hardened stainless steel insert restricts pull-out, yet requires a very low insertion force
- Electrolytic tin-plated copper bus system reduces corrosion
- Available in 2, 3 and 4 port models which are color coded for easy identification (5, 6 and 8 port models available soon)
- Every In-Sure connector allows for removal of the wire after the connection has been established by firmly twisting the wire back and forth while pulling on the connector
- Each connector is UL Listed 94 V-2, CSA Certified and rated to 600V and 105°C
- UL 467 Listed for grounding and bonding applications

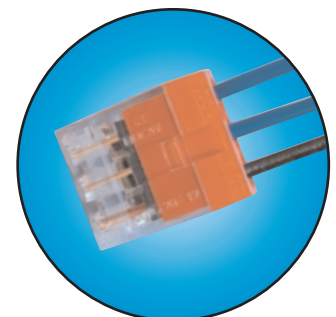


Perfect for residential, light commercial, lighting retrofit and pre-fab wiring jobs



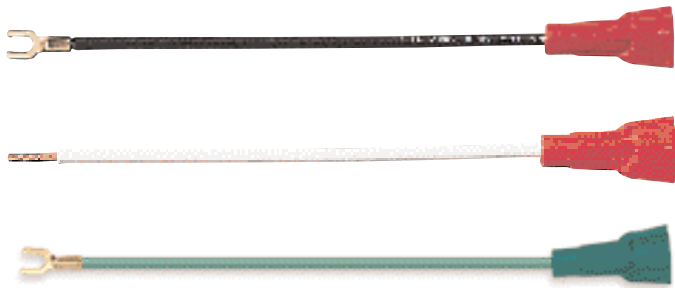
Integral test port for voltage and continuity testing

Model	Color	No. of Ports	Quantity	Cat. No.
12	Red	2	Box of 100	<b>30-012</b>
			Jar of 300	<b>30-012J</b>
			Box of 5,000	<b>30-612</b>
13	Orange	3	Box of 100	<b>30-013</b>
			Jar of 250	<b>30-013J</b>
			Box of 5,000	<b>30-613</b>
14	Yellow	4	Box of 100	<b>30-014</b>
			Jar of 200	<b>30-014J</b>
			Box of 3,500	<b>30-614</b>



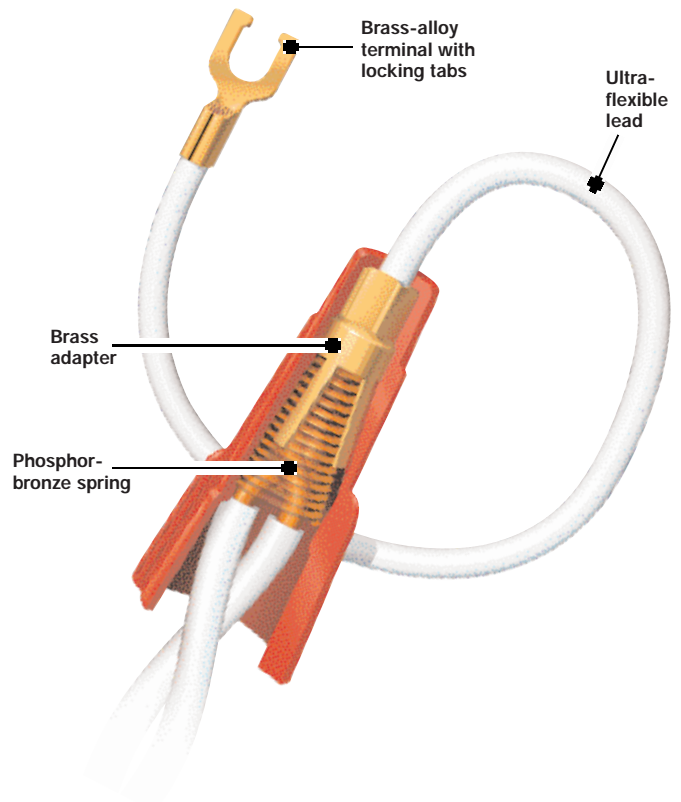
Accepts any combination of 12-18 AWG solid and stranded copper conductors

## Term-a-Nut® Wire Connectors

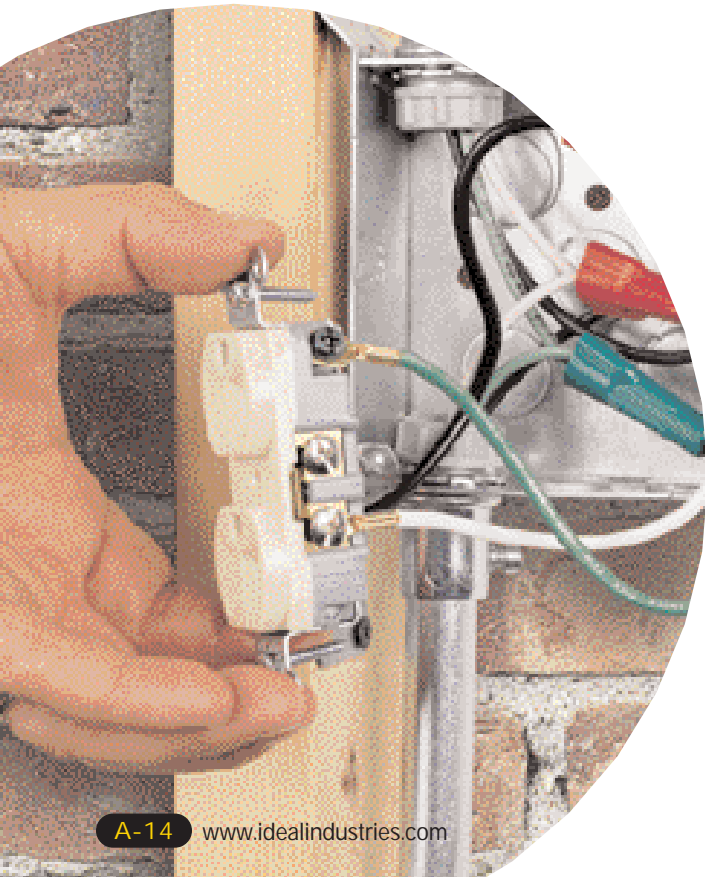


### Term-a-Nut® Pigtail Connectors

- Ultra-flexible 6-in. lead allows for easy positioning in outlet box – reduces stress on device, wires and connection
- Wide range of wire combinations – #18 through #12 AWG solid or stranded conductors
- Brass adapter for strong, conductive transition from spring to lead wire
- Brass-alloy terminals with locking tabs for fast, efficient device connection
- UL 486A and UL 486C Listed and tested to CSA standard C22.2 #65 and C22.2 #188
- Wire Range: Red/Green Shell – Min. 2 #18 AWG w/1 #14 AWG  
Max. 4 #12 AWG



Wire Connectors



Shell Color	Wire Color	Terminal End	Quantity/Bag	Cat. No.
Red	White	#10 fork	25	30-3170
Red	White	#10 fork	10	30-3370
Red	Black	#10 fork	25	30-3171
Red	Black	#10 fork	10	30-3371
Red	White	Stripped end	25	30-3172
Red	Black	Stripped end	25	30-3173
Green	Green	#10 fork	25	30-3180
Green	Green	#10 fork	10	30-3380
MultiPak*				30-3181

\*Includes 3 red shells w/white wire, 3 red shells w/black wire, and 3 green shells w/green wire



## Grounding Connectors and Accessories

- Term-a-Nut® grounding connectors address specific requirements for grounding to steel outlet boxes and wiring multiple devices
- Solid and stranded pigtail lead wires are convenient for stranded device grounding applications
- Grounding screws offer a unique thread-forming feature, plus combination hex, phillips, slotted and robertson tip
- UL Listed to UL486C and UL467 (grounding and bonding)

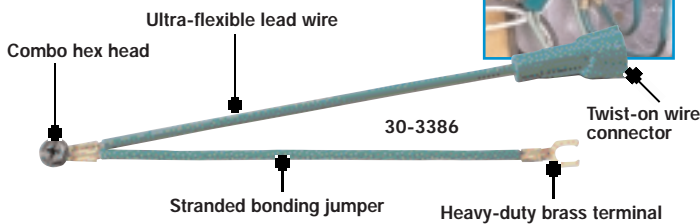


Description	Quantity	Cat. No.
Term-a-Nut® grounding connector, #12 AWG green w/#10 fork terminal	Bag of 25	30-3180
Term-a-Nut® grounding connector, #12 AWG green w/#10 ring and ground screw	Bag of 25	30-3182
Term-a-Nut® grounding connector, #12 AWG green w/#10 ring and ground screw, #12 AWG green jumper w/#10 fork terminal	Bag of 10	30-3386
Stranded wire jumper, #12 AWG green w/#10 fork terminal, #10 ring and ground screw, 7-3/4 in. long	Bag of 25	30-3184
Solid wire jumper, #14 AWG green w/loop and ground screw, 6-1/2 in. long	Box of 50	30-3390
Solid wire jumper, #12 AWG green w/loop and ground screw, 8-1/4 in. long	Box of 50	30-3392
Ground screw, thread-forming w/combination hex, phillips, slotted and robertson tip	Pack of 50	30-3194
Grounding clips – accepts 10, 12 and 14 AWG wire	Pack of 100	30-3395
Solid wire jumper, #12 AWG green w/loop and ground screw, 8-1/4 in. long	Bundle of 50	30-3496
Solid wire jumper, #12 AWG green w/loop and ground screw, 10 in. long	Bundle of 50	30-3394
Stranded wire jumper, #14 AWG green w/#10 fork terminal, #10 ring and ground screw, 7-3/4 in. long	Bag of 25	30-3183
Stranded wire jumper, #12 AWG green w/#10 fork terminal, #10 ring and ground screw, 7-3/4 in. long	Bundle of 100	30-3284
Ground screw, thread-forming w/combination hex, phillips, slotted and robertson tip	Bag of 100	30-3294

Wire Connectors

### Term-a-Nut® Grounding Connector

Connects grounding conductors to a device's grounding screw, connects grounding conductors to the mounting box and bonds the device to the box.



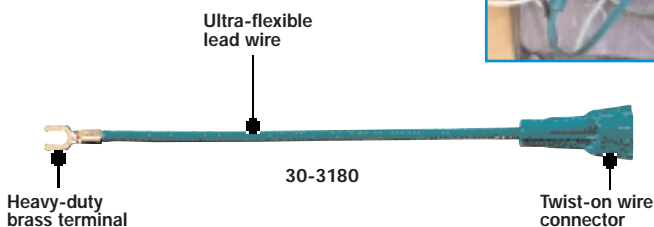
### Term-a-Nut® Grounding Connector

Bonds the box to the grounding conductors.



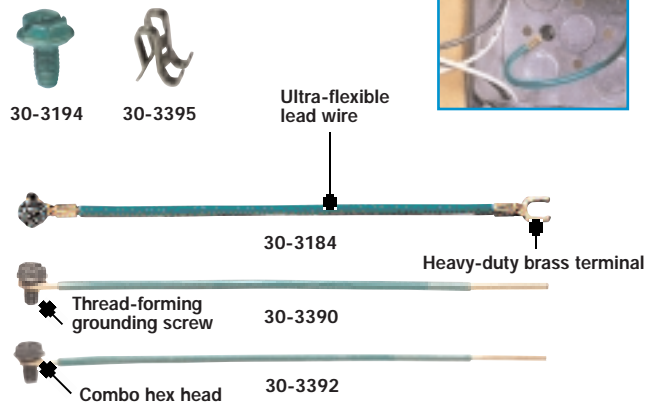
### Term-a-Nut® Grounding Connector

Connects multiple grounding conductors to a device.



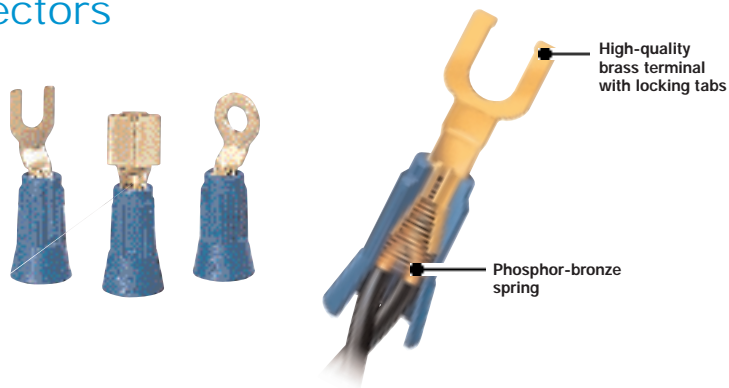
### Grounding Pigtail and Accessories

Connects the grounding screw of a device directly to the device mounting box.



## Term-a-Nut® Terminal Wire Connectors

- No tools required – installs quickly without crimping – easily removed for quick changes
- Use with single or multiple wires – solid and/or stranded #22 AWG #12 AWG
- Highly conductive brass terminal and phosphor-bronze spring for maximum conductivity and smooth performance
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- UL 486A and UL 486C Listed and tested to CSA C22.2 #65 and C22.2 #188



Terminal Configurations	Qty./Clamshell	Cat. No.	Qty./Clamshell	Cat. No.
#10 fork	10	30-2904	25	30-3004
#8 fork	10	30-2914	25	30-3014
.250 female disconnect	10	30-2906	25	30-3006
#10 ring	10	30-2912	25	30-3012
#8 ring	10	30-2910	25	30-3010
Assortment	40/kit*	30-3901		

\*Kit contains 8 each: 30-3004, 30-3014, 30-3006, 30-3012 and 30-3010.



## Crimp Terminals-Rings, Forks, Disconnects and Splices

- Butted seam-construction prevents splitting under maximum pressure
- Internal barrel serrations grip wires tightly to resist pull-out and reduce electrical resistance
- Tin-plated brass construction for corrosion resistance
- Shouldered barrel insulation quickly positions terminal for proper crimping
- Expanded insulation entry accommodates a wide variety of insulation diameters and provides additional insulation support
- Color-coded insulation and wire range stamped on terminal for easy identification



## Vinyl Insulated Ring Terminals

Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Stud Size (Inches)	Stud Size (mm)	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
						L	W	E	F	L	W	E	F				
22 – 18	0.5 – 1.0	6	3.7	.157	4.0	.764	.260	.394	.248	19.4	6.6	10.0	6.3	25	83-2121	—	—
		8	4.3			.819	.315	.394	.276	20.8	8.0	10.0	7.0	25	83-2131	—	—
		10	5.3			.819	.315	.394	.276	20.8	8.0	10.0	7.0	25	83-2141	—	—
		1/4	6.4			1.055	.457	.394	.433	26.8	11.6	10.0	11.0	25	83-2151	—	—
16 – 14	1.5 – 2.5	6	3.7	.177	4.5	.764	.260	.394	.248	19.4	6.6	10.0	6.3	25	83-2221	—	—
		8	4.3			.858	.335	.394	.307	21.8	8.5	10.0	7.8	25	83-2231	—	—
		10	5.3			.858	.374	.394	.287	21.8	9.5	10.0	7.3	25	83-2241	1,000	84-2241
		1/4	6.4			1.055	.472	.394	.433	26.8	12.0	10.0	11.0	25	83-2251	—	—
12 – 10	4.0 – 6.0	8	4.3	.248	6.3	1.047	.374	.512	.358	26.6	9.5	13.0	9.1	25	83-2331	—	—
		10	5.3			1.047	.374	.512	.358	26.6	9.5	13.0	9.1	25	83-2341	1,000	84-2341
		1/4	6.4			1.167	.472	.512	.413	29.5	12.0	13.0	10.5	25	83-2351	—	—
		5/16	8.4			1.339	.591	.512	.531	34.0	15.0	13.0	13.5	25	83-2361	—	—
		3/8	10.5			1.339	.591	.512	.531	34.0	15.0	13.0	13.5	25	83-2371	—	—

75° C/600 Volts max.







## Non-Insulated Ring Terminals

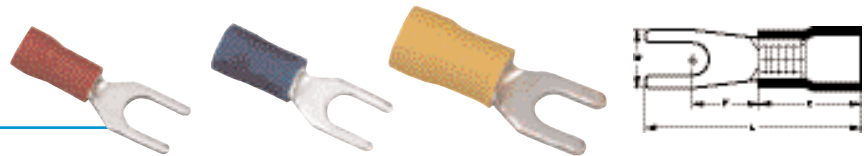
Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Stud Size (Inches)	Stud Size (mm)	Dimensions (Inches)*				Dimensions (mm)**				Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
				L	W	E	F	L	W	E	F				
22 - 18	0.5 - 1.0	8 10	4.3 5.3	.622	.315	.189	.276	15.8	8.0	4.8	7.0	25	83-0131	—	—
				.622	.315	.189	.276	15.8	8.0	4.8	7.0	25	83-0141	—	—
16 - 14	1.5 - 2.5	6	3.7	.567	.260	.189	.248	14.4	6.6	4.8	6.3	25	83-0221	—	—
		8	4.3	.661	.335	.189	.307	16.8	8.5	4.8	7.8	25	83-0231	—	—
		10	5.3	.661	.374	.189	.287	16.8	9.5	4.8	7.3	25	83-0241	1,000	84-0241
12 - 10	4.0 - 6.0	8	4.3	.772	.374	.236	.358	19.6	9.5	6.0	9.1	25	83-0331	—	—
		10	5.3	.772	.374	.236	.358	19.6	9.5	6.0	9.1	25	83-0341	1,000	84-0341
		1/4	6.4	.886	.472	.236	.413	22.5	12.0	6.0	10.5	25	83-0351	—	—
8	8.0	10	5.3	.937	.472	.337	.366	23.8	12.0	8.5	9.3	25	83-0421	—	—
		1/4	6.4	.937	.472	.337	.366	23.8	12.0	8.5	9.3	25	83-0431	—	—
		5/16	8.4	1.161	.591	.337	.543	29.8	15.0	8.5	13.8	25	83-0441	—	—
		3/8	10.5	1.161	.591	.337	.543	29.8	15.0	8.5	13.8	25	83-0451	—	—
6	14.0	10	5.3	1.173	.472	.413	.524	29.8	12.0	10.5	13.3	20	83-0511	—	—
		1/4	6.4	1.173	.472	.413	.524	29.8	12.0	10.5	13.3	20	83-0521	—	—
		5/16	8.4	1.280	.630	.413	.559	32.5	16.0	10.5	14.2	20	83-0531	—	—
		3/8	10.5	1.280	.630	.413	.559	32.5	16.0	10.5	14.2	20	83-0541	—	—
4	22.0	1/4	6.4	1.319	.650	.472	.531	33.5	16.5	12.0	13.5	20	83-0611	—	—
		5/16	8.4	1.319	.650	.472	.531	33.5	16.5	12.0	13.5	20	83-0621	—	—
		3/8	10.5	1.319	.650	.472	.531	33.5	16.5	12.0	13.5	20	83-0631	—	—

\*Plus or minus .020 in.  
\*\*Plus or minus .50mm



Crimp Terminals

## Vinyl Insulated Spade Terminals



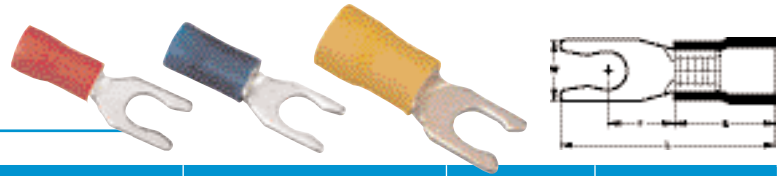
Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Stud Size (Inches)	Stud Size (mm)	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
						L	W	E	F	L	W	E	F				
22 - 18	0.5 - 1.0	6	3.7	.157	4.0	.827	.252	.394	.256	21.0	6.4	10.0	6.5	25	83-7111	1,000	84-7111
		8	4.3			.827	.283	.394	.256	21.0	7.2	10.0	6.5	25	83-7121	—	—
		10	5.3			.827	.374	.394	.256	21.0	9.5	10.0	6.5	25	83-7131	—	—
16 - 14	1.5 - 2.5	6	3.7	.177	4.5	.827	.236	.394	.256	21.0	6.0	10.0	6.5	25	83-7151	—	—
		8	4.3			.827	.283	.394	.256	21.0	7.2	10.0	6.5	25	83-7161	1,000	84-7161
		10	5.3			.827	.366	.394	.256	21.0	9.3	10.0	6.5	25	83-7171	1,000	84-7171
12 - 10	4.0 - 6.0	6	3.7	.248	6.3	1.004	.327	.512	.276	25.5	8.3	13.0	7.0	25	83-7201	—	—
		8	4.3			1.004	.283	.512	.276	25.5	9.0	13.0	7.0	25	83-7211	—	—
		10	5.3			1.004	.283	.512	.276	25.5	9.0	13.0	7.0	25	83-7221	500	84-7221
		1/4	6.4			1.240	.472	.512	.472	31.5	12.0	13.0	12.0	25	83-7231	—	—

75° C/600 Volts max.



**Insulated and Non-Insulated Terminals (#22 - #10 AWG) are UL Listed when used with IDEAL Crimp Tool #30-518 (Replacement Die #30-519).  
Non-Insulated Terminals (#8 - #4 AWG) are UL Listed when used with IDEAL Crimp Tool #83-005 or 88-843.  
Non-Insulated Disconnects and Vinyl Insulated Parallel Splices are not UL Listed; recommended IDEAL Crimp Tool #30-518.**

## Vinyl Insulated Snap Spade Terminals



Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Stud Size (Inches)	Stud Size (mm)	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions* (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.
						L	W	E	F	L	W	E	F		
22 - 18	0.5 - 1.0	6	3.7	.134	4.0	.827	.252	.394	.256	21.0	6.4	10.0	6.5	25	83-7011
		8	4.3			.827	.283	.394	.256	21.0	7.2	10.0	6.5	25	83-7021
		10	5.3			.827	.319	.394	.256	21.0	8.1	10.0	6.5	25	83-7031
16 - 14	1.5 - 2.5	6	3.7	.161	4.5	.827	.236	.394	.256	21.0	6.0	10.0	6.5	25	83-7051
		8	4.3			.827	.319	.394	.256	21.0	8.1	10.0	6.5	25	83-7061
		10	5.3			.827	.319	.394	.256	21.0	8.1	10.0	6.5	25	83-7071
12 - 10	4.0 - 6.0	8	4.3	.248	6.3	.992	.327	.512	.276	25.2	8.3	13.0	7.0	25	83-7081
		10	5.3			.992	.354	.512	.276	25.2	9.0	13.0	7.0	25	83-7091
		1/4	6.4			1.240	.472	.512	.472	31.5	12.0	13.0	12.0	25	83-7101

75° C/600 Volts max.

Listed 774A Cu Only Pressure Wire Connector

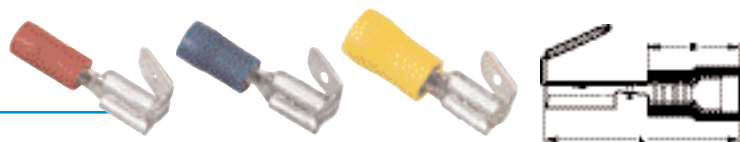
## Non-Insulated Spade Terminals



Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Stud Size (Inches)	Stud Size (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
				L	W	E	F	L	W	E	F				
22 - 18	0.5 - 1.0	6	3.7	.630	.252	.189	.256	16.0	6.4	4.8	6.5	25	83-6111	—	—
		8	4.3	.630	.283	.189	.256	16.0	7.2	4.8	6.5	25	83-6121		
		10	5.3	.630	.319	.189	.256	16.0	8.1	4.8	6.5	25	83-6131		
16 - 14	1.5 - 2.5	8	4.3	.630	.283	.189	.256	16.0	7.2	4.8	6.5	25	83-6161	—	—
		10	5.3	.630	.366	.189	.256	16.0	9.3	4.8	6.5	25	83-6171		
12 - 10	4.0 - 6.0	8	4.3	.728	.354	.236	.276	18.5	9.0	6.0	7.0	25	83-6211	—	—
		10	5.3	.728	.354	.236	.276	18.5	9.0	6.0	7.0	25	83-6221		
		1/4	6.4	.965	.472	.236	.472	24.5	12.0	6.0	12.0	25	83-6231		

Listed 774A Cu Only Pressure Wire Connector

## Vinyl Insulated Multi-Stack Disconnects

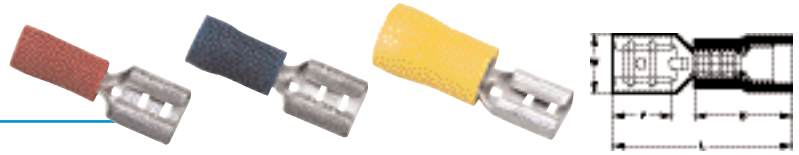


Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Tab Size (Inches)	Tab Size (mm)	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)						Dimensions (mm)						Ctn. Qty.	Cat. No.
						L	B	W	F	W1	F1	L	B	W	F	W1	F1		
22 - 18	0.5 - 1.0	.250 x .032	6.35 x 0.8	.150	3.8	.886	.413	.260	.315	.250	.323	22.5	10.5	6.6	8.0	6.35	8.2	25	83-9611
16 - 14	1.5 - 2.5	.250 x .032	6.35 x 0.8	.185	4.7	.886	.413	.260	.315	.250	.323	22.5	10.5	6.6	8.0	6.35	8.2	25	83-9621
12 - 10	4.0 - 6.0	.250 x .032	6.35 x 0.8	.244	6.2	.945	.512	.260	.315	.250	.323	22.5	13.0	6.6	8.0	6.35	8.2	25	83-9631

75° C/300 Volts max.

Listed 774A Cu Only Pressure Wire Connector

## Vinyl Insulated Female Disconnects



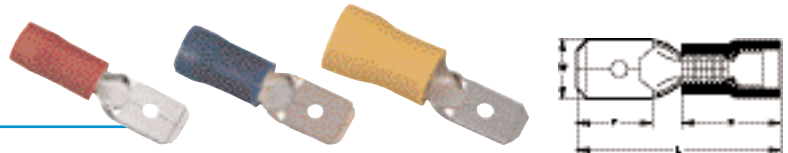
Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Tab Size (Inches)	Tab Size (mm)	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
						L	B	W	F	L	B	W	L				
22 – 18	0.5 – 1.0	.110 x .020	2.8 x 0.5	.150	3.8	.728	.413	.126	.256	18.5	10.5	3.2	6.5	25	83-9511	—	—
16 – 14	1.5 – 2.5	.110 x .020	2.8 x 0.5	.185	4.7	.748	.413	.126	.256	19.0	10.5	3.2	6.5	25	83-9521	—	—
22 – 18	0.5 – 1.0	.187 x .020	4.75 x 0.5	.150	3.8	.764	.413	.197	.252	19.4	10.5	5.0	6.4	25	83-9541	—	—
16 – 14	1.5 – 2.5	.187 x .020	4.75 x 0.5	.185	4.7	.764	.413	.197	.252	19.4	10.5	5.0	6.4	25	83-9551	—	—
22 – 18	0.5 – 1.0	.250 x .032	6.35 x 0.8	.150	3.8	.819	.413	.260	.287	20.8	10.5	6.6	7.3	25	83-9571	—	—
16 – 14	1.5 – 2.5	.250 x .032	6.35 x 0.8	.185	4.7	.819	.413	.260	.287	20.8	10.5	6.6	7.3	25	83-9581	500	84-9581
14 – 12	2.5 – 4.0	.250 x .032	6.35 x 0.8	.244	6.2	.917	.512	.260	.287	23.3	13.0	6.6	7.3	25	83-9591	—	—
12 – 10	4.0 – 6.0	.250 x .032	6.35 x 0.8	.244	6.2	.917	.512	.260	.287	23.3	13.0	6.6	7.3	25	83-9601	—	—

75° C/300 Volts max.



Disconnects

## Vinyl Insulated Male Disconnects

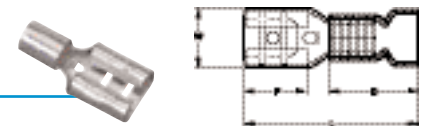


Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Tab Size (Inches)	Tab Size (mm)	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.
						L	B	W	F	L	B	W	F		
22 – 18	0.5 – 1.0	.250 x .032	6.35 x 0.8	.150	3.8	.858	.413	.250	.303	21.8	10.5	6.35	7.7	25	83-9971
16 – 14	1.5 – 2.5	.250 x .032	6.35 x 0.8	.185	4.7	.858	.413	.250	.303	21.8	10.5	6.35	7.7	25	83-9981
12 – 10	4.0 – 6.0	.250 x .032	6.35 x 0.8	.244	6.2	.945	.512	.250	.303	24.0	13.0	6.35	7.7	25	83-9991

75° C/300 Volts max.

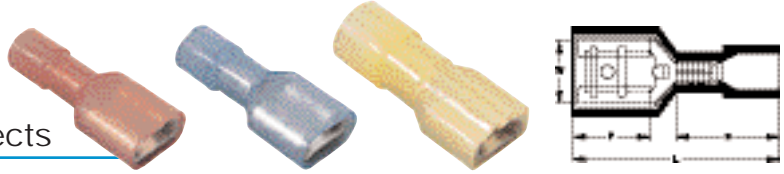


## Non-Insulated Female Disconnects



Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Tab Size (Inches)	Tab Size (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.
				L	B	W	F	L	B	W	F		
22 – 18	0.5 – 1.0	.110 x .020	2.8 x 0.5	.630	.189	.126	.256	16.0	4.8	3.2	6.5	25	83-9411
16 – 14	1.5 – 2.5	.110 x .020	2.8 x 0.5	.630	.189	.126	.256	16.0	4.8	3.2	6.5	25	83-9421
22 – 18	0.5 – 1.25	.187 x .020	4.75 x 0.5	.630	.189	.197	.252	16.0	4.8	5.0	6.4	25	83-9441
16 – 14	1.5 – 2.5	.187 x .020	4.75 x 0.5	.630	.189	.197	.252	16.0	4.8	5.0	6.4	25	83-9451
22 – 18	0.5 – 1.25	.250 x .032	6.35 x 0.8	.630	.189	.260	.287	16.0	4.8	6.6	7.3	25	83-9471
16 – 14	1.5 – 2.5	.250 x .032	6.35 x 0.8	.630	.189	.260	.287	16.0	4.8	6.6	7.3	25	83-9481
12 – 10	4.0 – 6.0	.250 x .032	6.35 x 0.8	.728	.236	.260	.287	18.5	6.0	6.6	7.3	25	83-9501

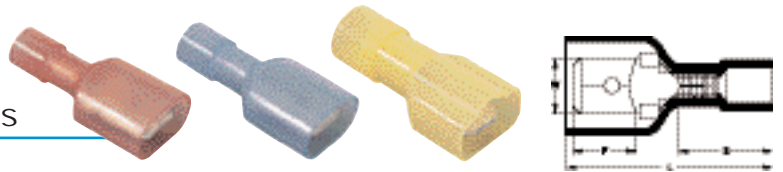




### Nylon Fully-Insulated Female Disconnects

Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Tab Size (Inches)	Tab Size (mm)	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
						L	B	W	F	L	B	W	L				
22 – 18	0.5 – 1.0	.250 x .032	6.35 x 0.8	.150	3.8	.866	.433	.260	.287	22.0	11.0	6.6	7.3	25	83-9771	—	—
16 – 14	1.5 – 2.5	.250 x .032	6.35 x 0.8	.185	4.7	.866	.433	.260	.287	22.0	11.0	6.6	7.3	25	83-9781	1,000	84-9781
12 – 10	4.0 – 6.0	.250 x .032	6.35 x 0.8	.244	6.2	.945	.512	.260	.287	24.0	13.0	6.6	7.3	25	83-9791	500	84-9791

105° C/300 Volts max.



### Nylon Fully-Insulated Male Disconnects

Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Tab Size (Inches)	Tab Size (mm)	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.
						L	B	W	F	L	B	W	F		
22 – 18	0.5 – 1.0	.250 x .032	6.35 x 0.8	.150	3.8	.906	.433	.250	.303	23.0	11.0	6.35	7.7	25	83-9911
16 – 14	1.5 – 2.5	.250 x .032	6.35 x 0.8	.185	4.7	.945	.433	.250	.303	24.0	11.0	6.35	7.7	25	83-9921
12 – 10	4.0 – 6.0	.250 x .032	6.35 x 0.8	.244	6.2	.984	.512	.250	.303	25.0	13.0	6.35	7.7	25	83-9931

105° C/300 Volts max.



### Vinyl Insulated Bullet Disconnects

Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.
				L	B	W	F	L	B	W	F		
22 – 18	0.5 – 1.0	.150	3.8	.846	.413	.157	.335	21.5	10.5	4.0	8.5	25	83-8001
16 – 14	1.5 – 2.5	.185	4.7	.846	.413	.157	.335	21.5	10.5	4.0	8.5	25	83-8011

75° C/300 Volts max.



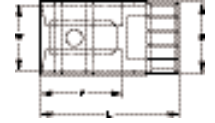
### Vinyl Fully-Insulated Receptacle Disconnects

Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.
				L	B	W	F	L	B	W	F		
22 – 18	0.5 – 1.0	.150	3.8	.917	.413	.153	.287	23.3	10.5	3.9	7.3	25	83-8101
16 – 14	1.5 – 2.5	.185	4.7	.917	.413	.153	.287	23.3	10.5	3.9	7.3	25	83-8111

75° C/300 Volts max.

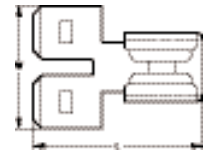
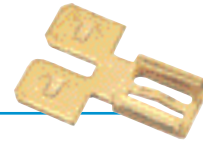


## Non-Insulated Flag Female Disconnect



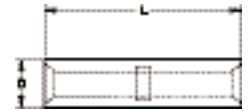
Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Tab Size (Inches)	Tab Size (mm)	Dimensions (Inches)				Dimensions (mm)				Ctn. Qty.	Cat. No.
				L	B	W	F	L	B	W	F		
16 – 14	1.5 – 2.5	.250 x .032	6.35 x 0.8	.551	.291	.260	.299	14.0	7.4	6.6	7.6	25	83-9401

## Disconnect Adapter – Male to Female (2-1)



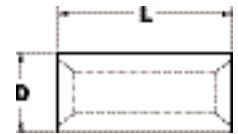
Tab Size (Inches)	Tab Size (mm <sup>2</sup> )	Dimensions (Inches)		Dimensions (mm)		Ctn. Qty.	Cat. No.
		L	W	L	W		
.250 x .032	6.35 x 0.8	.551	.260	14.0	6.6	25	83-9801

## Non-Insulated Butt Splices



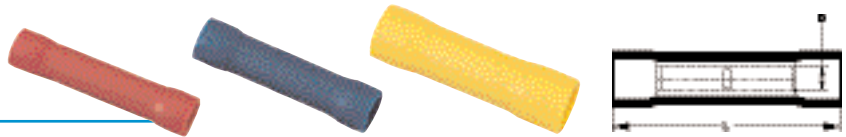
Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Dimensions (Inches)		Dimensions (mm)		Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
		L	D	L	D				
22 – 18	0.5 – 1.0	.591	.130	15.0	3.3	25	83-9001	—	—
16 – 14	1.5 – 2.5	.591	.154	15.0	3.9	25	83-9011	—	—
12 – 10	4.0 – 6.0	.591	.213	15.0	5.4	25	83-9021	500	84-9021
8	8.0	.827	.276	21.0	7.0	25	83-9031	250	84-9031
6	14.0	1.024	.350	26.0	8.9	20	83-9041	—	—
4	22.0	1.142	.445	29.0	11.3	20	83-9051	—	—

## Non-Insulated Parallel Splices



Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Dimensions (Inches)		Dimensions (mm)		Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
		L	D	L	D				
22 – 18	0.5 – 1.0	.315	.130	8.0	3.3	25	83-9071	—	—
16 – 14	1.5 – 2.5	.315	.154	8.0	3.9	25	83-9081	1,000	84-9081
12 – 10	4.0 – 6.0	.335	.213	8.5	5.4	25	83-9091	—	—

## Vinyl Insulated Butt Splices

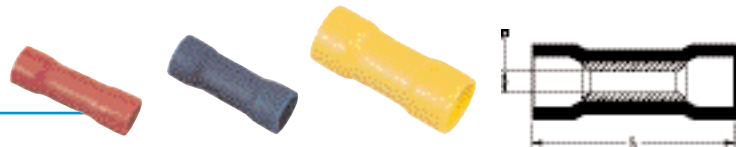


Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (Inches)	Dimensions (Inches)		Dimensions (mm)		Ctn. Qty.	Cat. No.	Ctn. Qty.	Cat. No.
				L	D	L	D				
22 – 18	0.5 – 1.25	.157	4.0	.986	.067	24.6	1.7	25	83-9281	1,000	84-9281
16 – 14	1.5 – 2.5	.177	4.5	.986	.091	24.6	2.3	25	83-9291	1,000	84-9291
12 – 10	4.0 – 6.0	.248	6.3	1.043	.134	26.5	3.4	25	83-9301	500	84-9301

75° C/600 Volts max.

Listed 774A Cu Only Pressure Wire Connector

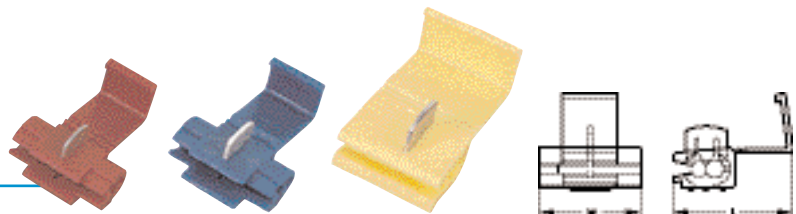
## Vinyl Insulated Parallel Splices



Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Max. Wire Ins. Dia. (Inches)	Max. Wire Ins. Dia. (mm)	Dimensions (Inches)		Dimensions (mm)		Ctn. Qty.	Cat. No.
				L	W	L	W		
22 – 18	0.5 – 1.0	.157	4.0	.512	.067	13.0	1.7	25	83-9351
16 – 14	1.5 – 2.5	.177	4.5	.512	.091	13.0	2.3	25	83-9361
12 – 10	4.0 – 6.0	.248	6.3	.591	.134	15.0	3.4	25	83-9371

75° C/600 Volts max.

## Tap Splice Connectors



Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Color	Dimensions (Inches)		Dimensions (mm)		Ctn. Qty.	Cat. No.
			L	W	L	W		
22 – 18	0.5 – 1.0	Red	1.063	.787	27.0	20.0	25	83-3261
16 – 14	1.5 – 2.5	Blue	1.063	.787	27.0	20.0	25	83-3271
12 – 10	4.0 – 6.0	Yellow	1.358	.807	34.5	20.5	25	83-3281

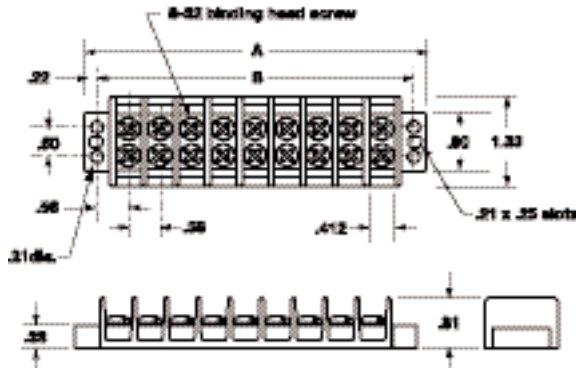
105° C/600 Volts max.

## Terminal Strips

- Heavy-duty, corrosion-resistant screws, surface plates and optional hardware
- Accessory hardware provides a variety of termination options
- Available cover helps prevent contact with live terminals

### 89-200 Series Terminal Strips 30A/600V\* UL Listed, CSA Certified

- .562 in. (14.28mm) center spacing
- Accepts wire sizes from 22 through 10 AWG Cu
- #8-32 phillslot, zinc-plated steel terminal screws



No. of Poles	Dimensions (Inches)		Cat. No.
	A	B	
2	2.13	1.69	89-202
3	2.69	2.25	89-203
4	3.25	2.81	89-204
6	4.37	3.94	89-206
8	5.50	5.06	89-208
10	6.62	6.19	89-210
12	7.75	7.31	89-212

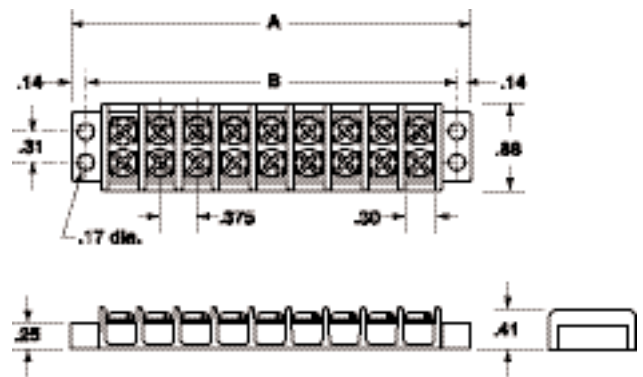
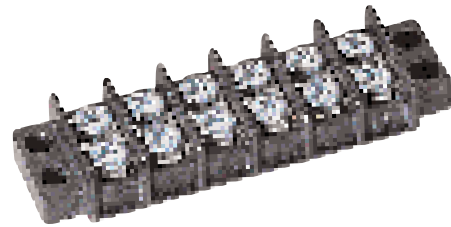
\*Max. electrical rating 30A/250V when used with optional quick-connects



- Rugged polyester thermoplastic base (UL Rated 94V-O)
- Rated at -40°F (-40°C) to 260°F (130°C)
- UL E62622 Listed and CSA LR15364 Certified

### 89-300 Series Terminal Strips 15A/250V\*\* UL Listed, 15A/150V\*\* CSA Certified

- .375 in. (9.52mm) center spacing
- Accepts wire sizes from 22 through 14 AWG Cu
- #6-32 phillslot, zinc-plated steel terminal screws



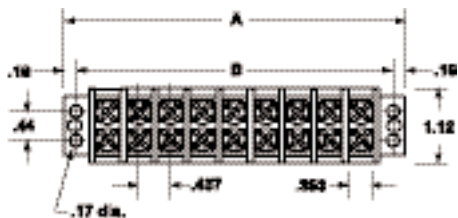
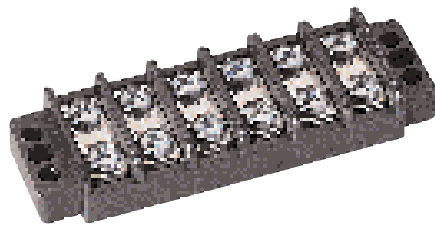
No. of Poles	Dimensions (Inches)		Cat. No.
	A	B	
2	1.40	1.12	89-302
4	2.16	1.88	89-304
6	2.90	2.62	89-306
8	3.66	3.38	89-308
10	4.40	4.12	89-310
12	5.16	4.88	89-312

\*\*Max. electrical rating 15A/125V when used with optional quick-connects



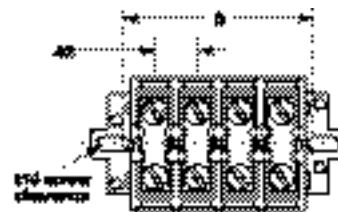
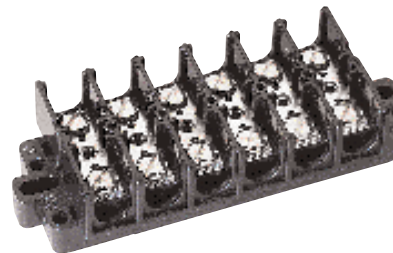
## 89-400 Series Terminal Strips 20A/250V UL Listed, CSA Certified

- .437 in. (11.10mm) center spacing
- Accepts wire sizes from 22 through 12 AWG Cu
- #6-32 phillslot, zinc-plated steel terminal screws



## 89-500 Series Terminal Strips 60A/600V\* UL Listed, CSA Certified

- Available shorting-block style
- .625 in. (15.88mm) center spacing
- Accepts wire sizes from 22 through 6 AWG Cu
- #10-32 slotted, nickel plated brass terminal screws



No. of Poles	Dimensions (Inches)		Cat. No.
	A	B	
2	1.63	1.31	89-402
4	2.51	2.18	89-404
6	3.38	3.06	89-406
8	4.25	3.93	89-408
10	5.13	4.81	89-410
12	6.00	5.68	89-412

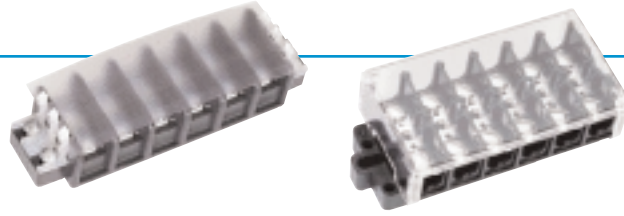
No. of Poles	Dimensions (Inches)		Standard Block Cat. No.	Shorting Block Cat. No.
	A	B		
4	3.75	2.87	89-504	89-505
6	5.00	4.12	89-506	89-507
8	6.25	5.37	89-508	89-509
12	8.75	7.87	89-512	89-513

\*Max. electrical rating 60A/600V achieved only when used with #6 AWG copper wire crimped to ring terminal



## Covers

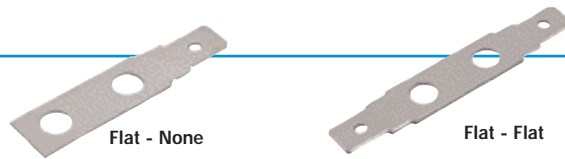
- Helps prevent contact with live terminals



No. of Circuits	For Use With Terminal Strip Series			
	89-200 Clear Cat. No.	89-300 Clear Cat. No.	89-400 Clear Cat. No.	89-500 Clear Cat. No.
2	89-233	89-334	89-434	—
3	89-234	—	—	—
4	89-235	89-335	89-435	89-514
6	89-236	89-336	89-436	89-516
8	89-237	89-337	89-437	89-518
10	89-238	89-338	89-438	—
12	89-239	89-339	89-439	89-520

## Quick Connects

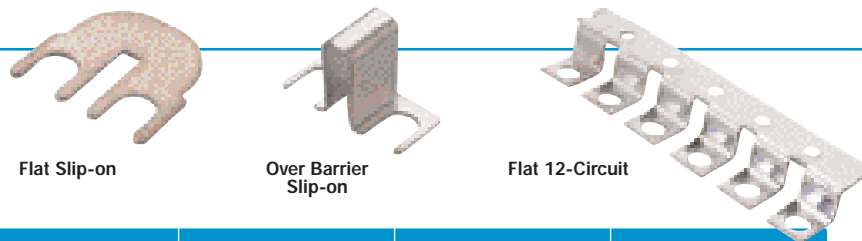
- Allows fast, flexible circuit changes



For Use With		Qty	Flat - None Cat. No.	Flat - Flat Cat. No.
Terminal Strip Series	Tab Size (Inches)			
89-300	.187 x .020	10 pcs.	89-314	89-317
89-200 & 89-400	.250 x .031	10 pcs.	89-414	89-417

## Jumpers

- Provides easy connection of multiple circuits



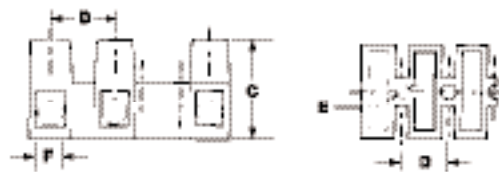
For Use With	Center Spacing (Inches)	Qty.	Flat Slip-on Cat. No.	Over Barrier Slip-on Cat. No.	Flat 12-Circuit Cat. No.
89-200	.562	10 pcs.	89-229	89-224	—
		100 pcs.	89-230	—	—
89-300	.375	10 pcs.	89-323	89-324	—
		100 pcs.	89-330	—	—
89-400	.437	10 pcs.	89-423	89-424	—
		100 pcs.	89-430	—	—
89-500	.625	2 pcs.	—	—	89-525





## Barrier Strips

- Recessed screws and tubular contacts provide added safety and help prevent short circuits
- Tubular contacts connect stripped, un-terminated solid or stranded wire directly to each contact
- Integrated wire protectors prevent twisting and breakage of stranded wire during connection
- Modular 12-circuit design can be cut into smaller sections, or stacked end-to-end
- Rugged nylon 66 housing, UL 94V2
- Operating temperature rated at 221°F (105°C)



### Barrier Strips

Electrical Ratings	Wire Range (AWG)	No. of Circuits	Model No.	Dimensions (Inches)						Dimensions (mm)						Cat. No.
				A	B	C	D	E	F*	A	B	C	D	E	F**	
20A/600V UL	22 - 12	12	PA8DS	3.787	0.669	0.570	0.315	0.114	0.110	96.2	17.0	14.5	8.0	2.9	2.8	89-608
10A/400V CSA	20 - 18															
30A/600V UL	22 - 10	12	PA10DS	4.626	0.795	0.670	0.394	0.142	0.134	117.0	20.2	17.0	10.0	3.6	3.4	89-610
20A/400V CSA	18 - 14															
35A/600V UL/CUL	22 - 10	12	PA12DS	5.540	0.937	0.748	0.472	0.154	0.154	140.7	23.8	19.0	12.0	3.9	3.9	89-612
50A/600V UL/CUL	20 - 8	12	PA14DS	6.220	1.008	0.992	0.531	0.173	0.189	158.0	25.6	25.2	13.5	4.4	4.8	89-614

\*Plus or minus .004 in.

\*\*Plus or minus 0.1mm





## Crimp Connectors



- Designed for making fast, permanent, pressure-type connections
- Long, zinc-plated steel sleeves maximize contact area with conductors
- Solid copper sleeves require less crimping pressure and resist corrosion in harsh environments
- Will not vibrate loose when securely crimped
- Steel crimp connectors are UL 486C Listed and CSA 22.2 #188 Certified; comply with Federal Specification W-S-610E. Copper crimp connector is UL 486C Listed only

### Steel Crimp Connectors

Model	Wire Combination Range	Quantity	Cat. No.
410	600V No. 18 thru 10 AWG Min. 1 No. 14 & 1 No. 18 Max. 2 No. 10 & 2 No. 14	Box of 100	<b>30-410</b>
		Carton of 1,000	<b>30-510</b>
		Keg of 10,000	<b>30-610</b>
411	600V No. 18 thru 8 AWG Min. 3 No. 12 Max. 4 No. 10	Box of 40	<b>30-401</b>
		Box of 50	<b>30-411</b>
		Carton of 1,000	<b>30-511</b>
412	600V No. 18 thru 4 AWG Min. 1 No. 14 & 1 No. 16 Max. 2 No. 8 & 1 No. 6	Box of 20	<b>30-402</b>
		Box of 50	<b>30-412</b>
		Carton of 1,000	<b>30-512</b>

### Dimensions (Inches)



Model	A	B
410 Steel	3/8	13/64
411 Steel	5/8	1/4
412 Steel	51/64	19/64



**IDEAL hand tools U.L. listed for Model 410, 411, 412.**  
Crimps: 30-420, 30-425, 30-429, 30-430.

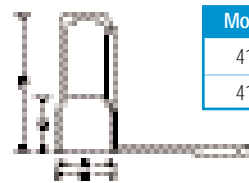
## Wrap-Cap® Insulators



- Provide high dielectric and physical protection for UL Listed, non-insulated pressure-type wire connectors
- Cap and loop design eliminates need for tape
- Unique design completely covers splice — insulates both around and between wires
- Reusable and easy to install
- UL Listed and CSA Certified for 600V maximum building wiring (1,000V maximum for fixtures and signs); temperature rated at 75°C (167°F) maximum

Model	Description	Quantity	Cat. No.
415	Insulator for Model 408 & 410 sleeves	Box of 20	<b>30-405</b>
		Box of 100	<b>30-415</b>
		Carton of 1,000	<b>30-515</b>
		Keg of 10,000	<b>30-615</b>
417	Insulator for Model 411 & 412 sleeves	Box of 10	<b>30-407</b>
		Box of 50	<b>30-417</b>
		Carton of 1,000	<b>30-517</b>

### Dimensions (Inches)



Model	A	B	C	D
415	1/2	5/8	23/32	1-13/64
417	11/16	3/4	3/4	1-25/32



## Pre-Insulated Crimp Connectors

- Three models cover a wide range of wire combinations from 22 AWG stranded through 8 AWG stranded
- Compact design fits easily into tight locations
- Flared skirt protects against turned-back strands
- Beveled opening eases wire entry



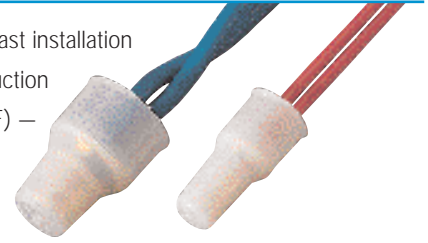
Model	Wire Combination Range	Quantity	Cat. No.
48	600V* Min. 2 No. 22 Max. 1 No. 14 w/2 No. 18	1,000	30-146
		10,000	30-646
49	600V* 2 #22 Max. 1 No. 12 & 2 No. 18	1,000	30-147
		10,000	30-647
NC-8	600V* Min. 4 No. 16 Max. 1 No. 12 w/4 No. 14	1,000	30-148
		5,000	30-648

\*1,000V maximum in fixtures and signs



## Buchanan Construction Products Splice Cap Insulators

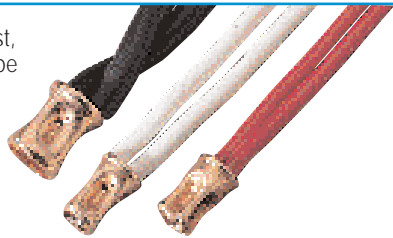
- Convenient, safe and fast installation
- Snap-on nylon construction
- Rated at 105°C (221°F) – 600V (1,000V for fixtures and signs)



For Connector Model	Quantity	Cat. No.
2006S & 2008S	Box of 100	2007
	Bag of 1,000	2007B
2011S	Box of 50	2014
	Bag 500	2014B

## Buchanan Construction Products Splice Cap Crimp Connectors

- Designed for making fast, permanent, pressure-type connections
- Solid copper sleeves require less crimping pressure
- Resist corrosion in harsh environments
- Tin-plated steel sleeves also available
- UL 486C Listed and CSA 22.2 #188 Certified; comply with Federal Specification W-S-61D



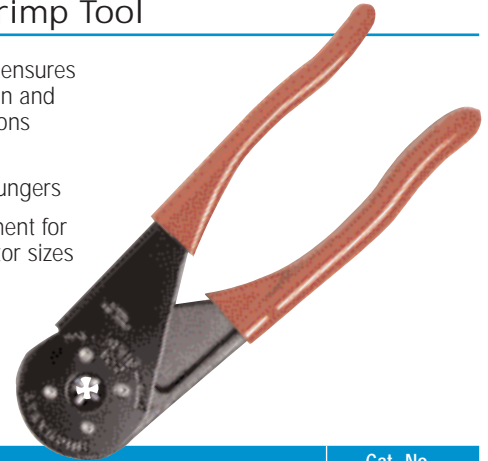
Model	Wire Combination Range	Quantity	Cat. No.
Copper Crimp Connector	600V* No.18 thru 10 AWG Min. 2 No. 18 Max. 4 No. 12	Box of 100	2006S
		Bag of 1,000	2006SB
Copper Crimp Connector	600V* No. 14 thru 4 AWG Min. 2 No. 10 Max. 2 No. 6	Box of 50	2011S
		Bag of 500	2011SB
Steel Crimp Connector	600V* No. 18 thru 10 AWG Min. 2 No. 18 Max. 4 No. 12	Box of 100	2008S
		Bag of 1,000	2008SB

\*1,000V maximum in fixtures and signs



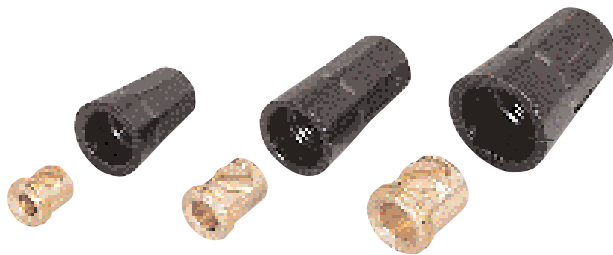
## Buchanan Construction Products Four-Way Crimp Tool

- Patented design ensures even compression and reliable connections
- Spring-loaded, cam-actuated plungers
- Fingertip adjustment for different connector sizes



Description	Cat. No.
Four-Way Crimp Tool	C-24

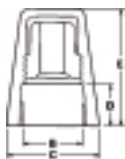
## Set-Screw Wire Connectors



- Eliminates need for restripping wire each time connection is disturbed
- Solid brass sleeves in three sizes handle 18 through 12 AWG wires
- Set-screw easily and securely applies maximum compression to conductors to ensure a vibration-resistant splice
- Permits fast visual inspection of splice
- Tough, flame-retardant shell rated at 150°C (302°F)
- UL 486C Listed and CSA 22.2 #188 certified; comply with Federal Specification W-S-610E

Model	Wire Combination Range	Quantity	Cat. No.
10	300V No. 22 thru 16 AWG Min. 1 No. 20 w/1 No. 22 Max. 2 No. 14 w/1 No. 16	Box of 100	30-210
		Carton of 1,000	30-310
11	600V No. 22 thru 14 AWG Min. 1 No. 14 w/1 No. 20 Max. 3 No. 14 w/2 No. 18	Box of 100	30-211
		Carton of 1,000	30-311
22	600V No. 20 thru 10 AWG Min. 1 No. 16 w/3 No. 18 Max. 2 No. 10 w/1 No. 12	Box of 100	30-222
		Carton of 1,000	30-322

### Dimensions (Inches)

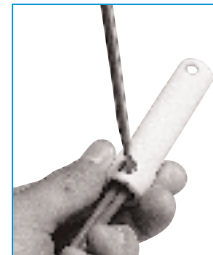


Model	Insert		Shell		
	A	B	C	D	E
10	1/8	5/16	1/2	19/64	45/64
11	3/16	3/8	33/64	13/32	63/64
22	1/4	1/2	11/16	13/32	1-1/64



## Set-Screw Holder

- Convenient tool for holding and tightening set-screw connectors
- Accepts IDEAL Models 11 and 22 set-screw connectors



For Connector Models	Cat. No.
11 & 22	K-2422

## Noalox® Anti-Oxidant



- Anti-oxidant and anti-seizing compound improves efficiency and service life of aluminum electrical applications
- Suspended zinc particles penetrate and cut aluminum oxide
- Provides additional inner-strand and inner-conductor current paths for improved conductivity and cooler connections
- Carrier material excludes air to prevent further oxidation
- For use with all types of pressure-type wire connectors including screw-on, tap, service entrance and split-bolt
- Reduces galling and seizing on aluminum conduit joints – promotes good ground continuity

Description	Cat. No.
1/2-oz. Tube	30-024
4-oz. Squeeze bottle	30-026
8-oz. Squeeze bottle	30-030
8-oz. Brush cap	30-031
1-gal. Bucket	30-032
5-gal. Bucket	30-040

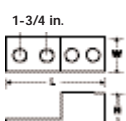
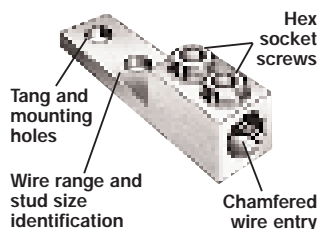
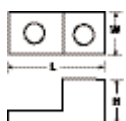
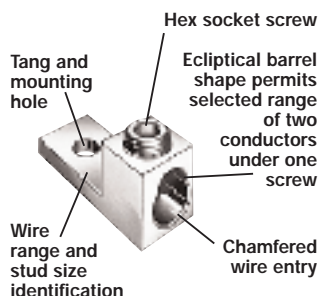
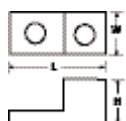
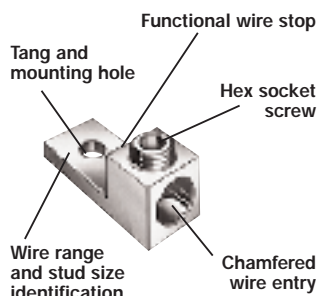
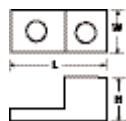
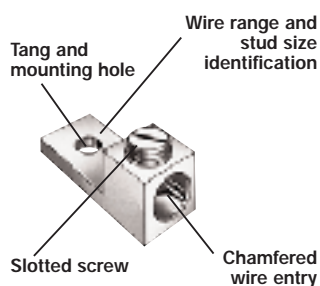


## Powr-Connect™ Mechanical Lugs

- Chamfered entry for faster, more reliable connections
- Uniform plating resists corrosion, reduces contact resistance and provides maximum conductivity
- UL Listed at 600V – acceptable for use through 2,000V
- Can be used through 8,000V if installed in accordance with National Electric Code Section 310-6 (UL Green Book)
- UL 486B Listed for dual-rated connectors – UL 486A Listed for copper connectors
- Meets ANSI C119.4 requirements

### Dual-Rated (Al/Cu) Single-Barrel Connectors

- Electro tin-plated, high-strength aluminum alloy construction
- UL 486B Listed AL9CU



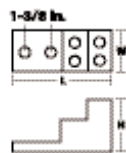
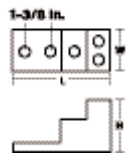
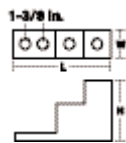
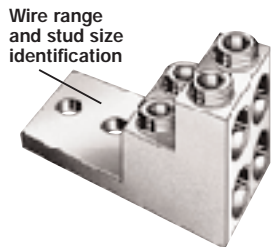
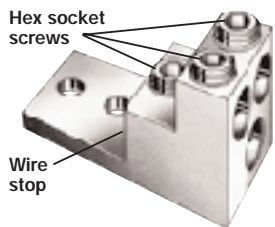
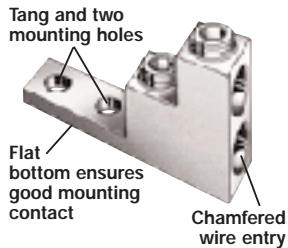
Model	Wire Range	Dimensions (Inches)			Stud Size (In.)	Cat. No.
		L	W	H		
LA-50-1 Narrow type – special mounting requirements	6 – 14 AWG	1-1/16	3/8	1/2	1/4	87-002
LA-2	2 – 14 AWG	1-5/32	1/2	9/16	1/4	87-005
LA-1/0	1/0 – 14 AWG	1-15/32	5/8	25/32	1/4	87-007
LA-1/0*	1/0 – 14 AWG	1-15/32	5/8	25/32	3/8	87-008
LA-2/0	2/0 – 14 AWG	1-15/32	5/8	25/32	1/4	87-009
LA-2/0*	2/0 – 14 AWG	1-15/32	5/8	23/32	3/5	87-010
LA-250	250 KCMIL – 6 AWG	2	1	1-1/8	5/16	87-011
LA-250*	250 KCMIL – 6 AWG	2	1	1-1/8	3/8	87-012
LA-300	300 KCMIL – 6 AWG	2	1	1-1/8	5/16	87-013
LA-300*	300 KCMIL – 6 AWG	2	1	1-1/8	3/8	87-014
LA-350	350 KCMIL – 6 AWG	2-1/4	1-1/8	1-1/4	3/8	87-015
LA-350*	350 KCMIL – 6 AWG	2-1/4	1-1/8	1-1/4	1/2	87-016
LA-500	500 KCMIL – 4 AWG	2-13/16	1-1/4	1-9/16	3/8	87-017
LA-500*	500 KCMIL – 4 AWG	2-13/16	1-1/2	1-9/16	1/2	87-018
LA-600	600 KCMIL – 2 AWG	3-3/16	1-1/2	1-9/16	3/8	87-019
LA-800	800 – 300 KCMIL	3-1/2	1-3/4	1-15/16	5/8	87-021
LA-1000	1,000 – 350 KCMIL	3-1/2	1-3/4	1-15/16	5/8	87-023
LA-630	600 KCMIL – 4 AWG (1) 250 KCMIL – 1/0 AWG (2)	2-13/16	1-3/8	1-13/16	3/8	87-025
L1D2-600	600 KCMIL – 2 AWG	5-5/16	1-1/2	1-1/2	1/2	87-027
L1D2-800	800 – 00 KCMIL	6-3/16	1-3/4	1-7/8	1/2	87-029
L1D2-1000	1,000 – 500 KCMIL	6-3/16	1-3/4	1-7/8	1/2	87-031

\*Larger mounting hole



## Dual-Rated (Al/Cu) Panel-Board Connectors

- Electro tin-plated, high-strength aluminum alloy construction
- UL 486B Listed AL9CU



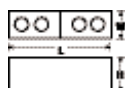
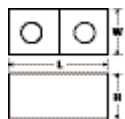
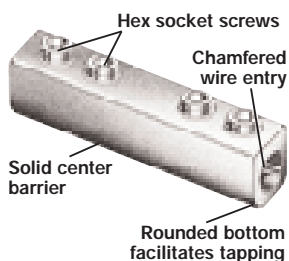
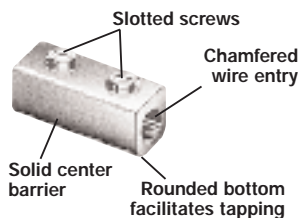
Model	Wire Range	Dimensions (Inches)			Stud Size (In.)	Cat. No.
		L	W	H		
PV2-600	600 KCMIL – 2 AWG	4-29/32	1-1/2	3	3/8	87-126
PV2-750	750 KCMIL – 1/0 AWG	4-29/32	1-9/16	3	3/8	87-129
PV3-600	600 KCMIL – 2 AWG	4-29/32	2-1/2	3	3/8	87-132
PV3-750	750 KCMIL – 1/0 AWG	4-29/32	2-27/32	3	3/8	87-135
PV4-600	600 KCMIL – 2 AWG	4-29/32	2-1/2	3	3/8	87-138
PV4-750	750 KCMIL – 3/0 AWG	4-29/32	2-27/32	3	3/8	87-141



Mechanical Lugs

## Dual-Rated (Al/Cu) Splicer Reducers

- Electro tin-plated, high-strength aluminum alloy construction
- UL 486B Listed AL9CU



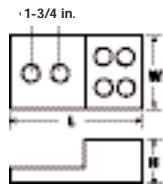
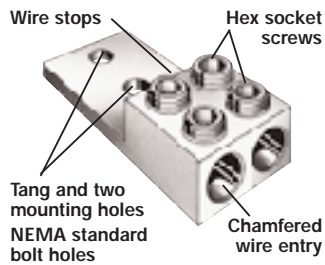
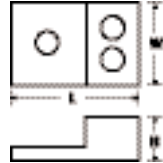
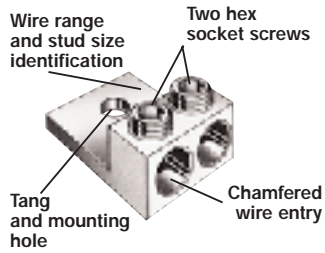
Model	Wire Range	Dimensions (Inches)			Stud Size (In.)	Cat. No.
		L	W	H		
SR-2*	2 – 14 AWG	1-3/8	1/2	9/16	5/8	87-143
SR-1/0*	1/0 – 14 AWG	1-29/32	3/4	3/4	7/8	87-144
SR-250	250 KCMIL – 6 AWG	3-15/16	1	1-1/8	1-15/16	87-145
SR-350	350 KCMIL – 6 AWG	4-3/16	1-1/8	1-3/16	2-1/16	87-146
SR-500	500 KCMIL – 3/0 AWG	5	1-3/8	1-1/2	2-7/16	87-147
SR-750	750 – 250 KCMIL	6-1/4	1-5/8	1-3/4	3-1/16	87-148

\*Slotted screws



## Dual-Rated (Al/Cu) Two-Barrel Connectors

- Electro tin-plated, high-strength aluminum alloy construction
- UL 486B Listed AL9CU

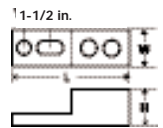
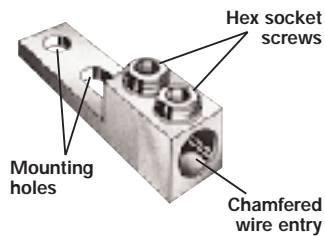
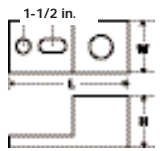
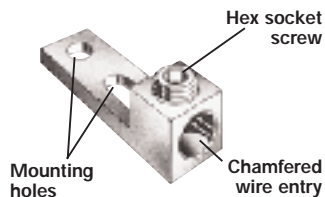


Model	Wire Range	Dimensions (Inches)			Stud Size (In.)	Cat. No.
		L	W	H		
L2A1-1/0	1/0 – 14 AWG (2)	1-15/32	1-1/8	25/32	1/4	87-040
L2A1-2/0	2/0 – 14 AWG (2)	1-15/32	1-1/4	25/32	1/4	87-042
L2A1-250	250 KCMIL – 6 AWG (2)	2-9/16	1-5/8	1-3/16	3/8	87-044
L2A1-350	350 KCMIL – 6 AWG (2)	2-7/8	1-15/16	1-1/4	1/2	87-046
L2A1-600	600 KCMIL – 2 AWG (2)	3-3/16	2-13/32	1-9/16	1/2	87-048
L2D2-350	350 KCMIL – 6 AWG (2)	4-1/4	2-5/16	1-3/8	1/2	87-055
L2D2-600	600 KCMIL – 2 AWG (2)	5-5/16	2-3/4	1-1/2	1/2	87-060



## Dual-Rated (Al/Cu) Switch-Gear Connectors

- Electro tin-plated, high-strength aluminum alloy construction
- UL 486B Listed AL9CU



Model	Wire Range	Dimensions (Inches)			Stud Size (In.)	Cat. No.
		L	W	H		
SG-350	350 KCMIL – 4 AWG	4-11/16	1-1/4	1-9/16	1/2	87-102
SG-500	500 KCMIL – 400 KCMIL	4-11/16	1-1/4	1-9/16	1/2	87-105
SG-800	800 – 300 KCMIL	6-3/16	1-1/2	1-7/8	1/2	87-110
SG-1000	1,000 – 350 KCMIL	6-3/16	1-5/8	1-7/8	1/2	87-115





## Dual-Rated (Al/Cu) Connectors with Multiple Stud Holes Per NEMA for Spade-Type Transformers and Bus Bars

- Clear-coated, high-strength aluminum alloy construction
- Chamfered wire entry
- Hex socket, pressure-pad screws

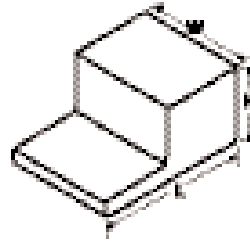


FIG. 1

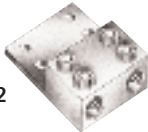


FIG. 2



FIG. 3



FIG. 4

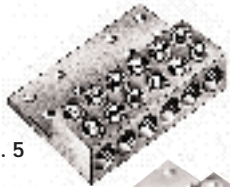


FIG. 5



FIG. 6



FIG. 7



FIG. 8

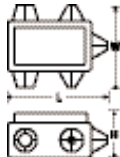
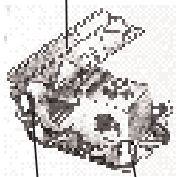
Model	Fig. No.	Wire Range	No. of Wires	No. of Mtg. Holes	Dimensions (Inches)			Tang Thickness (In.)	Cat. No.
					L	W	H		
L2D4-250	2	250 KCMIL – 6 AWG	2	4	5-5/16	3	1-1/2	3/8	88-032
L3D4-250	3	250 KCMIL – 6 AWG	3	4	5-5/16	3	1-1/2	3/8	88-033
L6D8-250	5	250 KCMIL – 6 AWG	6	8	5-5/16	6-5/32	1-1/2	3/8	88-035
L8D8-250	6	250 KCMIL – 6 AWG	8	8	5-5/16	8-1/4	1-1/2	3/8	88-036
L1D2-350	1	350 KCMIL – 6 AWG	1	2	5-5/16	1-1/4	1-1/2	3/8	88-037
L3D4-350	3	350 KCMIL – 6 AWG	3	4	5-5/16	3-1/2	1-1/2	3/8	88-039
L4D6-350	4	350 KCMIL – 6 AWG	4	6	5-5/16	4-23/32	1-1/2	3/8	88-040
L6D8-350	5	350 KCMIL – 6 AWG	6	8	5-5/16	7-1/8	1-1/2	3/8	88-041
L8D8-350	6	350 KCMIL – 6 AWG	8	8	5-5/16	9-9/16	1-1/2	3/8	88-042
L1D2-500	1	500 KCMIL – 6 AWG	1	2	5-5/16	1-1/4	1-1/2	3/8	88-043
L2D4-500	2	500 KCMIL – 6 AWG	2	4	5-5/16	3	1-1/2	3/8	88-044
L3D4-500	3	500 KCMIL – 6 AWG	3	4	5-5/16	3-7/8	1-1/2	3/8	88-045
L4D6-500	4	500 KCMIL – 6 AWG	4	6	5-5/16	5-1/4	1-1/2	3/8	88-046
L6D10-500	—	500 KCMIL – 6 AWG	6	10	5-5/16	7-29/32	1-1/2	3/8	88-047
L8D12-500	7	500 KCMIL – 6 AWG	8	12	5-5/16	10-19/32	1-1/2	3/8	88-048
L2D4-750	2	750 KCMIL – 1/0 AWG	2	4	6-3/16	3-1/4	1-7/8	9/16	88-050
L3D4-750	3	750 KCMIL – 1/0 AWG	3	4	6-3/16	5	1-7/8	9/16	88-051
L6D12-750	8	750 KCMIL – 1/0 AWG	6	12	6-3/16	10	1-7/8	9/16	88-053
L8D12-750	7	750 KCMIL – 1/0 AWG	8	12	6-3/16	13-3/8	1-7/8	9/16	88-054

## Powr-Connect™ Tap Connectors

### Dual-Rated (Al/Cu) Parallel-Tap Connectors with Covers

- Electro tin-plated, high-strength aluminum alloy construction
- UL 486B Listed AL9CU – 105°C, 600V max.

Insulating cover reduces installation cost



Flexible hinge

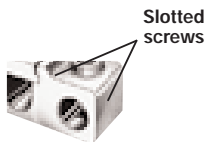
Self-locking design

Model	Wire Range		Strip Length (In.)	Dimensions (Inches)			Cat. No.
	Main	Tap		L	W	H	
GP-2C	2 – 12 AWG	4 – 14 AWG	5/8	2-7/32	1-29/32	1-7/64	87-180
GP-1/0C	1/0 – 2 AWG	1/0 – 14 AWG	3/4	2-5/8	2-5/32	1-1/4	87-182
GP-250C	250 KCMIL – 1/0 AWG	250 KCMIL – 6 AWG	1-1/16	3-7/16	2-7/8	1-5/8	87-186
GP-350C	350 KCMIL – 4/0 AWG	350 KCMIL – 6 AWG	1-1/4	3-3/4	3-3/16	1-3/4	87-190
GP-500C	500 – 350 KCMIL	500 KCMIL – 2 AWG	1-3/8	4-3/8	3-5/16	2-3/32	87-194

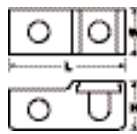


### Dual-Rated (Al/Cu) Parallel-Tap Connectors without Covers

- Electro tin-plated, high-strength aluminum alloy construction
- UL 486B Listed AL9CU



Slotted screws



Serrated barrel bottom for positive terminations

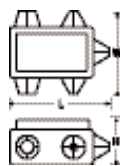
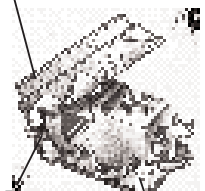
Model	Wire Range		Strip Length (In.)	Dimensions (Inches)			Cat. No.
	Main	Tap		L	W	H	
GP-2	2 – 12 AWG	4 – 14 AWG	5/8	1-25/64	5/8	7/8	87-150
GP-1/0	1/0 – 2 AWG	1/0 – 14 AWG	3/4	1-3/4	3/4	1	87-152
GP-250	250 KCMIL – 1/0 AWG	250 KCMIL – 6 AWG	1-1/16	2-9/32	1-1/16	1-5/16	87-156
GP-350	350 KCMIL – 4/0 AWG	250 KCMIL – 6 AWG	1-1/4	2-9/16	1-1/4	1-7/16	87-160
GP-500	500 – 350 KCMIL	500 KCMIL – 2 AWG	1-3/8	3-1/8	1-3/8	1-3/4	87-164



### Dual-Rated (Al/Cu) Tee-Tap Connectors with Covers

- Electro tin-plated, high-strength aluminum alloy construction
- UL 486B Listed AL9CU – 105°C, 600V max.

Insulating cover reduces installation cost



Flexible hinge

Self-locking design

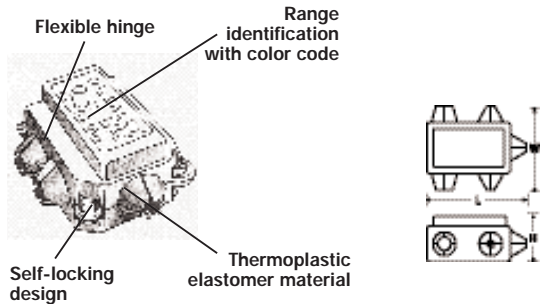
Model	Wire Range		Strip Length (In.)	Dimensions (Inches)			Cat. No.
	Main	Tap		L	W	H	
GT-1/0C	1/0 – 2 AWG	1/0 – 14 AWG	3/4	2-5/8	2-5/32	1-1/4	87-242
GT-250-0C	250 KCMIL – 1/0 AWG	1/0 – 14 AWG	1-1/16	3-7/16	2-7/8	1-5/8	87-244
GT-350C	350 KCMIL – 4/0 AWG	350 KCMIL – 6 AWG	1-1/4	3-3/4	3-3/16	1-3/4	87-250





## Insulating Covers for GP and GT Connectors

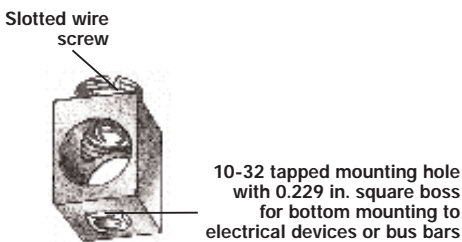
- 600V maximum
- 105°C maximum temperature



Model	Cover For Model	Color	Dimensions (Inches)			Cat. No.
			L	W	H	
GIC-2	GP-2 & GT-2	Yellow	2-7/32	1-29/32	1-7/64	87-370
GIC-1/0	GP-1/0 & GT-1/0	Gray	2-5/8	2-5/32	1-1/4	87-372
GIC-250	GP & GT-250 GP & GT 250-0	Red	3-7/16	2-7/8	1-5/8	87-374
GIC-350	GP & GT-350	Yellow	3-3/4	3-3/16	1-3/4	87-376
GIC-500	GP & GT-500	Blue	4-3/8	3-5/16	2-3/32	87-380



## Dual-Rated (Al/Cu) Collar Connectors



Model	Wire Range	Dimensions (Inches)			Cat. No.
		L	W	H	
CA-60**	2 – 14 AWG	9/16	15/32	15/32	87-583
CA-110*	1/0 – 14 AWG	19/32	17/32	5/8	87-585

\*Successfully tested to AL9CU  
\*\*Successfully tested to AL7CU



## Powr-Connect™ Grounding Connectors

- Designed to maintain proper contact and alignment between ground and wire rod
- Brass or plated screws for corrosion resistance
- High-strength copper alloy construction

### Heavy-Duty Clamps



Model	Rod Dia. (In.)	Wire Range	Dimensions (Inches)			Cat. No.
			H	W	L	
WB58	5/8	1/0 – 8	2-1/8	7/8	1	87-958
WB34	3/4	1/0 – 8	2-1/4	1-1/16	1	87-934



### High-Strength Ground Clamps



Model	Pipe Size (In.)	Wire Range	Dimensions (Inches)			Cat. No.
			H	W	L	
J	1/2 – 1	2 – 10	2-3/4	2-3/8	3/4	87-563
J2	1-1/4 – 2	2 – 10	3-3/4	3-5/8	7/8	87-564
J2124	2-1/2 – 4	4 – 10	6	6-5/16	1	87-565



### Standard-Duty Clamps

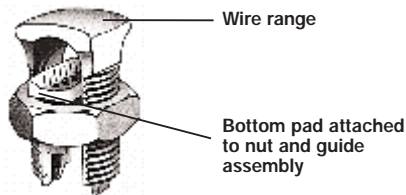


Model	Rod Dia. (In.)	Wire Range	Dimensions (Inches)			Cat. No.
			H	W	L	
G-4	1/2	2 – 10	1-7/8	13/16	11/16	87-812
G-5	5/8	2 – 10	2	7/8	5/8	87-858



## Type K Split Bolts for Copper Connections

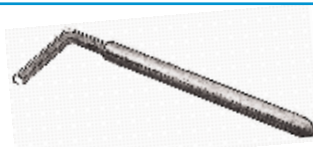
- High-strength copper alloy construction (nut, bolt and body)
- UL 486A Listed



Model	Range for Equal Run & Tap	Min. Tap with Max. Run	Cat. No.
K-10*	10 str. – 12 str.	16 str.	87-650
K-8	8 str. – 10 str.	14 str.	87-651
K-6	6 sol. – 8 str.	14 str.	87-652
K-4	4 sol. – 8 str.	14 str.	87-653
K-3	2 sol. – 6 str.	14 str.	87-654
K-2	2 str. – 6 str.	14 str.	87-655
K-1/0	1/0 str. – 4 str.	14 str.	87-656
K-2/0	2/0 str. – 2 str.	14 str.	87-657
K-3/0	3/0 str. – 1 str.	8 sol.	87-658
K-250	250 KCMIL – 1 str.	8 str.	87-660
K-350	350 KCMIL – 1/0 str.	1/0 str.	87-661
K-500	500 KCMIL – 2/0 str.	2/0 str.	87-662
K-750	750 KCMIL – 4/0 str.	4/0 str.	87-663



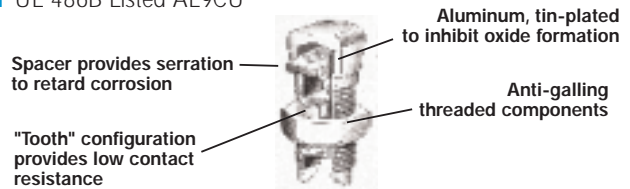
## Hex Wrenches



Model	Hex.	Length (Inches)	Cat. No.
WR-516	5/16	9	87-396
WR-38	3/8	10	87-397

## Dual-Rated (Al/Cu) Type AS Split Bolts

- UL 486B Listed AL9CU

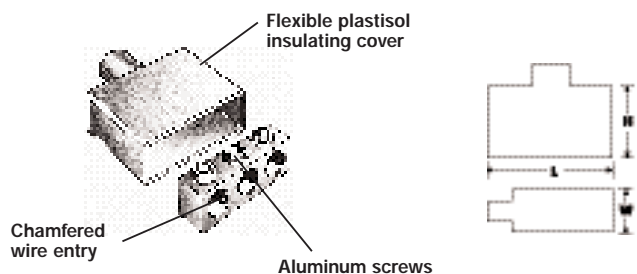


Model	Wire Range				Cat. No.
	Run		Tap		
	Max.	Min.	Max.	Min.	
AS-6	6 str.	10 sol.	6 str.	10 sol.	87-681
AS-4	4 str.	8 sol.	4 str.	10 sol.	87-682
AS-2	2 str.	6 sol.	2 str.	8 str.	87-683
AS-1/0	1/0 str.	2 compact	1/0 str.	8 sol.	87-685
AS-2/0	2/0 str.	2 compact	2/0 str.	8 str.	87-686
AS-4/0	4/0 str.	2 compact	4/0 str.	6 str.	87-687
AS-350	350 KCMIL	1/0 compact	350 KCMIL	4 str.	87-689
AS-500	500 KCMIL	400 compact	500 KCMIL	2 compact	87-691



## Dual-Rated (Al/Cu) Street-Light Connector Kit with Cover

- UL 486A Listed (Lug only)



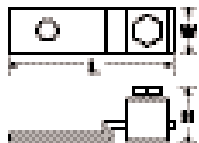
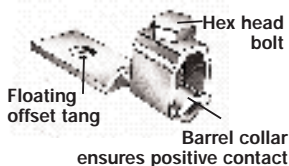
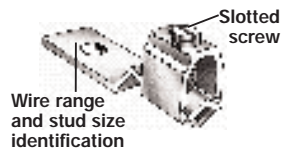
Model	Wire Range	No. of Cond.	Dimensions (Inches)			Cat. No.
			L	W	H	
SLK-1/0	1/0 – 14 AWG	3	2	1-3/16	2-3/16	88-100



## Powr-Connect™ Mechanical Solderless Lugs

### Single-Hole Solderless Lugs for Copper Conductors (Offset)

- Electrolytic copper construction
- UL 486A listed



Model	Wire Range	Stud Size (In.)	Dimensions (Inches)			Cat. No.
			L	W	H	
CF-25*	10 – 14 AWG	#8	1	5/16	3/8	87-700
CF-35	6 – 14 AWG	3/16	1-3/32	3/8	3/4	87-701
CF-70	4 – 14 AWG	1/4	1-5/16	1/2	13/16	87-702
CF-90	2 – 8 AWG	1/4	1-15/32	1/2	1	87-703
CF-125	1/0 – 2 AWG	1/4	1-13/16	5/8	1-11/32	87-704
CF-175	3/0 – 2 AWG	3/8	2-3/64	3/4	1-9/16	87-705
CF-225	4/0 – 2 AWG	5/16	2-5/8	1	1-13/16	87-706

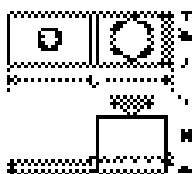
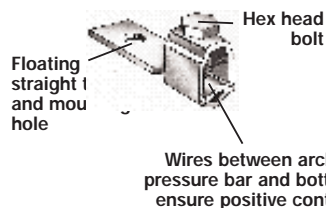
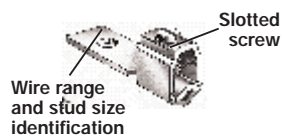
\*Not CSA Certified



Mechanical Lugs

### Single-Hole Solderless Lugs for Copper Conductors (Straight)

- Electrolytic copper construction
- UL 486A Listed

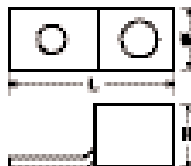
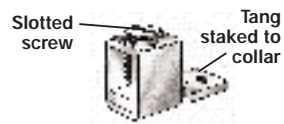


Model	Wire Range	Stud Size (In.)	Dimensions (Inches)			Cat. No.
			L	W	H	
CFS-35	6 – 14 AWG	3/16	1-9/64	3/8	11/16	87-721
CFS-70	4 – 14 AWG	1/4	1-1/4	1/2	27/32	87-722
CFS-90	2 – 8 AWG	1/4	1-15/32	1/2	31/32	87-723
CFS-125	1/0 – 2 AWG	1/4	1-15/16	5/8	1-1/4	87-724
CFS-175	3/0 – 2 AWG	3/8	2-1/4	3/4	1-9/16	87-725
CFS-225	4/0 – 2 AWG	5/16	2-3/8	1	1-21/32	87-726



### Single-Hole Solderless Lugs for Copper Conductors

- Electrolytic copper construction
- UL 486A Listed

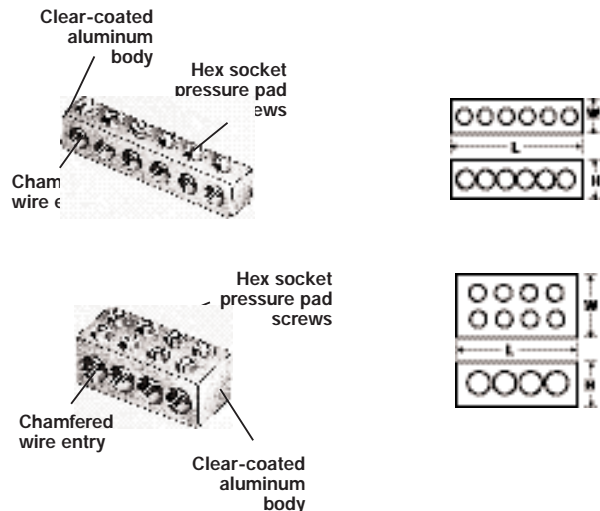


Model	Wire Range	Stud Size (In.)	Dimensions (Inches)			Cat. No.
			L	W	H	
FT-65	6 – 14 AWG	3/16	1	3/8	3/4	87-736
FT-90	1/0 – 14 AWG	1/4	1-17/64	5/8	1	87-738



## Dual-Rated (Al/Cu) Above-Ground Transformer Connectors

- Clear-coated, high-strength aluminum alloy construction

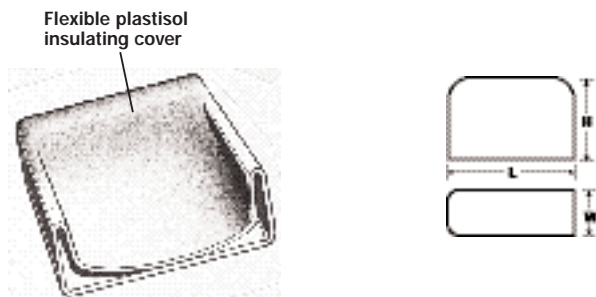


Model	Wire Range	No. of Wires	Dimensions (Inches)			Cat. No.
			L	W	H	
NA250-4	250 KCMIL – 6 AWG	4	3-5/8	7/8	1-1/8	<b>88-103</b>
NA250-6	250 KCMIL – 6 AWG	6	5-3/8	7/8	1-1/8	<b>88-104</b>
NA350-4	350 KCMIL – 6 AWG	4	3-27/32	1	1-3/8	<b>88-106</b>
NA350-6	350 KCMIL – 6 AWG	6	5-21/32	1	1-3/8	<b>88-107</b>
NA350-8	350 KCMIL – 6 AWG	8	7-15/32	1	1-3/8	<b>88-108</b>
NA500-4	500 KCMIL – 2 AWG	4	4-27/32	1	1-5/8	<b>88-109</b>
NA500-6	500 KCMIL – 2 AWG	6	7-7/32	1	1-5/8	<b>88-110</b>
NA500-8	500 KCMIL – 2 AWG	8	9-19/32	1	1-5/8	<b>88-111</b>
ND750-4	750 KCMIL – 2 AWG	4	6-5/8	2	2-1/2	<b>88-113</b>



## Insulating Covers for Above-Ground Transformer Connectors

- Clear-coated, high-strength aluminum alloy construction
- Sizes to fit all connectors



Model	Dimensions (Inches)			Cat. No.
	L	W	H	
NC4-250	3-7/8	1-19/32	3-3/8	<b>88-136</b>
NC6-250	5-23/32	1-19/32	3-3/8	<b>88-137</b>
NC8-250	7-17/32	1-19/32	3-3/8	<b>88-138</b>
NC4-350	4-1/8	1-27/32	3-3/8	<b>88-139</b>
NC6-350	6	1-27/32	3-3/8	<b>88-140</b>
NC4-500	5-5/32	2-3/16	3-3/8	<b>88-152</b>
NC6-500	7-5/8	2-3/16	3-3/8	<b>88-153</b>
NC8-500	10-3/32	2-3/16	3-3/8	<b>88-154</b>

No cover available for ND-750 models



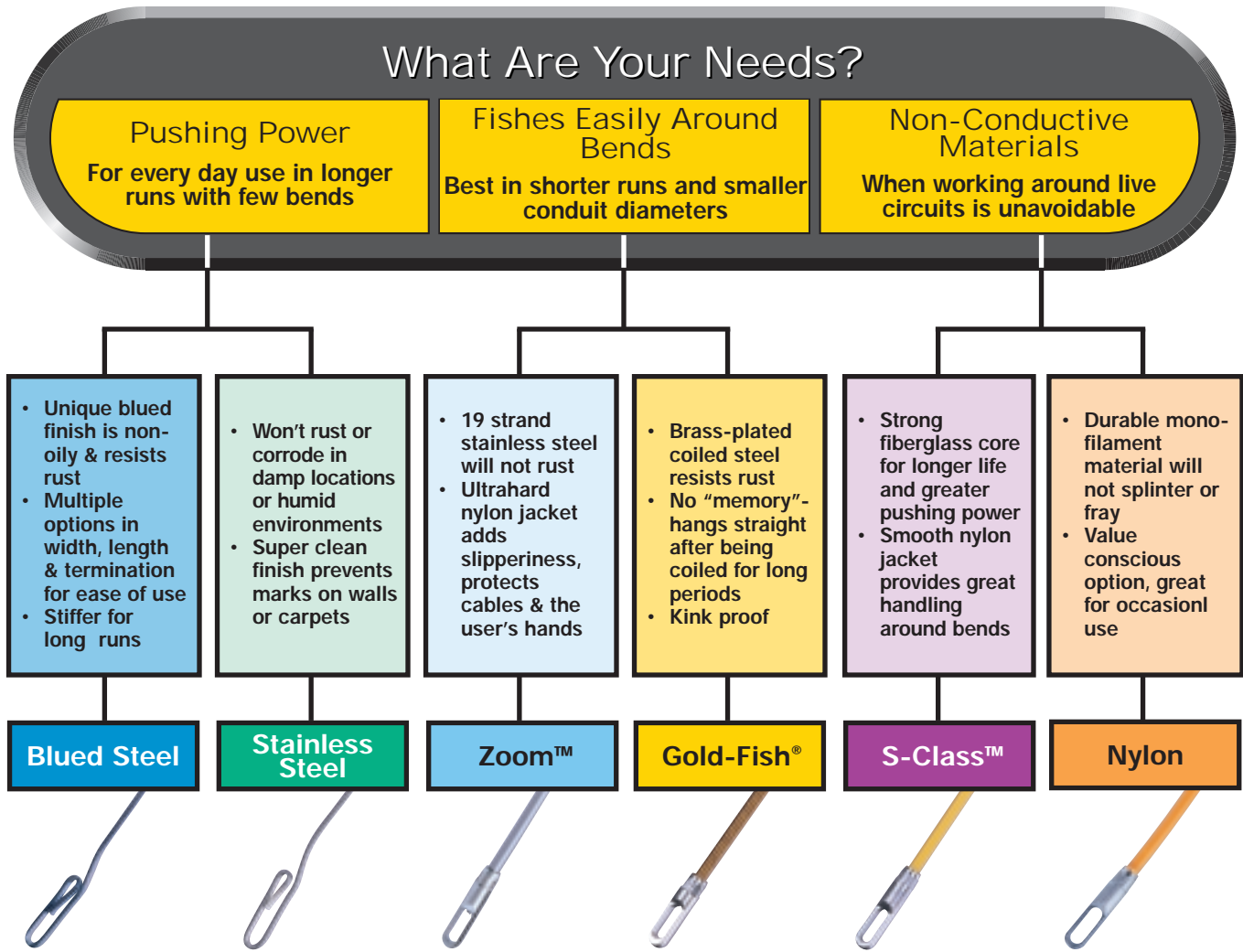
B

# Wire Installation



## Fish Tape Material Selection Guide

Selection Guide



**⚠ WARNING**

Always use approved safety glasses when using this product.  
 Do not use near energized equipment. Electrical shock may occur. Make sure all power is off.  
 Do not use pliers or other tools that may kink, damage, or weaken any round fish tapes such as S-Class®, Nylon or Zoom™. Use only a fish tape puller designed for this purpose.  
 While fish tapes made of fiberglass, nylon or other composite materials are non-conductive, they may have a metal eyelet that is conductive and could be grounded against conduit. Do not use on live electrical circuits.  
 Do not attempt to use fish tape that is fractured or has multiple ends.  
 Keep the fish tape wound in the reel to prevent damage to the tape.  
 Use this product in a safe work position to prevent loss of balance.  
 Never remove the screws from case while fish tape is coiled inside the reel.  
 Failure to follow instructions may result in severe bodily harm or damage to property.



## Tape Selection Guide

Width & Thickness	Length	Case Diameter	End Type	Tuff-Grip™ Pro	Tuff-Grip™	Tape-Pak®	Tape-Pak® w/footage counter	Rapid-Pak®	Thumb-Winder™	Replacement Tapes
<b>Blued Steel</b>										
1/8 in. x .045 in.	25	7 in.	Formed hook	X	X	X	X	X	31-012	X
1/8 in. x .045 in.	40	For 12 in.	Formed hook	X	X	X	X	X	X	31-904
1/8 in. x .045 in.	50	7 in.	Formed hook	X	X	X	X	X	31-010	X
1/8 in. x .045 in.	100	For 12 in.	Formed hook	X	X	X	X	X	X	31-079
1/8 in. x .060 in.	50	12 in.	Formed hook	X	X	X	31-082	X		31-039
1/8 in. x .060 in.	60	12 in.	Formed hook	31-055	X	X	X	X	X	31-035
1/8 in. x .060 in.	100	12 in.	Formed hook	X	X	X	31-126	31-081	X	31-040
1/8 in. x .060 in.	100	12 in.	Swivel ball end	31-224	X	X	X	X	X	31-040
1/8 in. x .060 in.	100	12 in.	Gold fish leader end	31-124	X	X	X	X	X	31-040
1/8 in. x .060 in.	120	12 in.	Formed hook	31-056	X	X	X	X	X	31-036
1/8 in. x .060 in.	200	12 in.	Formed hook		X	X	31-127	31-098	X	31-041
1/8 in. x .060 in.	200	12 in.	Swivel ball end	31-225	X	X	X	X	X	31-041
1/8 in. x .060 in.	200	12 in.	Gold fish leader end	31-125	X	X	X	X	X	31-041
1/8 in. x .060 in.	240	12 in.	Formed hook	31-057	X	X	X	X	X	31-038
1/8 in. x .060 in.	500	12 in.	Formed hook	X	X	X	X	X	X	31-3380
1/8 in. x .060 in.	50	12 in.	Formed hook	31-059	X	X	X	X	X	31-050
1/8 in. x .060 in.	100	None	Formed hook	31-058	X	X	X	X	X	31-051
1/8 in. x .060 in.	200	None	Formed hook	X	X	X	X	X	X	31-052
1/8 in. x .060 in.	300	None	Formed hook	X	X	X	X	X	X	31-2127
1/8 in. x .060 in.	400	None	Formed hook	X	X	X	X	X	X	31-2128
1/8 in. x .060 in.	600	None	Formed hook	X	X	X	X	X	X	31-2980
1/8 in. x .060 in.	700	None	Formed hook	X	X	X	X	X	X	31-3379
1/8 in. x .060 in.	750	None	Formed hook	X	X	X	X	X	X	31-2139
1/8 in. x .060 in.	1,000	None	Formed hook	X	X	X	X	X	X	31-3384
1/8 in. x .060 in.	10,000	None	Formed hook	X	X	X	X	X	X	31-2982
<b>Black Steel</b>										
1/8 in. x .060 in.	50	8-1/2 in.	Formed hook	X	X	31-033	X	X	X	31-004
1/8 in. x .060 in.	100	12 in.	Formed hook	31-024	X	X	X	X	X	
1/8 in. x .060 in.	200	12 in.	Formed hook	31-025	X	X	X	X	X	
<b>Stainless Steel</b>										
1/8 in. x .060 in.	120	12 in.	Formed hook	31-066	X	X	X	X	X	31-073
1/8 in. x .060 in.	240	12 in.	Formed hook	31-067	X	X	X	X	X	31-074
<b>S-Class® Nylon Jacketed Fiberglass</b>										
3/16 in. diameter	25	8-1/2 in.	Eyelet	X	X	31-157	X	X	X	None
3/16 in. diameter	50	12 in.	Leader	31-060	X	X	X	31-187	X	31-150
3/16 in. diameter	50	12 in.	Eyelet	31-062	X	X	X	31-190	X	31-160
3/16 in. diameter	100	12 in.	Leader	31-061	X	X	X	31-186	X	31-152
3/16 in. diameter	100	12 in.	Eyelet	31-063	X	X	X	31-189	X	31-162
3/16 in. diameter	125	For 12 in.	Leader	X	X	X	X	X	X	31-191
3/16 in. diameter	125	For 12 in.	Eyelet	X	X	X	X	X	X	31-205
3/16 in. diameter	200	16 in.	Leader	X	31-064	X	X	31-207	X	31-155
3/16 in. diameter	200	16 in.	Eyelet	X	31-065	X	X	31-208	X	31-165
3/16 in. diameter	300	None	Eyelet	X	X	X	X	X	X	31-2138
3/16 in. diameter	400	None	Eyelet	X	X	X	X	X	X	31-400
3/16 in. diameter	500	None	Eyelet	X	X	X	X	X	X	31-3370
<b>Nylon Monofilament</b>										
3/16 in. diameter	25	8-1/2 in.	Eyelet	X	X	31-540	X	X	X	31-550
3/16 in. diameter	50	12 in.	Eyelet	31-542	X	X	X	X	X	31-552
3/16 in. diameter	100	12 in.	Eyelet	31-544	X	X	X	X	X	31-554
<b>Gold-Fish Brass Plated Steel Coil</b>										
3/16 in. diameter	25	8-1/2 in.	Eyelet	X	X	31-143	X	X	X	31-140
3/16 in. diameter	50	12 in.	Eyelet	31-144	X	X	X	X	X	31-141
3/16 in. diameter	50	For 12 in.	Small Eyelet	X	X	X	X	X	X	31-132
3/16 in. diameter	75	12 in.	Eyelet	31-145	X	X	X	X	X	Use 31-133
3/16 in. diameter	75	For 12 in.	Small Eyelet	X	X	X	X	X	X	31-133
3/16 in. diameter	100	—	Eyelet	X	X	X	X	X	X	31-142
3/16 in. diameter	100	—	Small Eyelet	X	X	X	X	X	X	31-134
<b>Zoom™ Nylon Jacketed Stainless Steel</b>										
3/16 in. diameter	50	12 in.	Eyelet	31-090	X	X	X	X	X	31-091
3/16 in. diameter	100	12 in.	Eyelet	31-092	X	X	X	X	X	31-093
3/16 in. diameter	200	12 in.	Eyelet	X	31-096	X	X	X	X	31-097

## Tuff-Grip™ Pro

- Patented Tuff-Cuff™ tape retaining feature keeps tape properly positioned in the opening
- Patented full-circle handle band helps keep dirt and moisture out, prolonging life
- Easier to install replacement tapes
- Superior pull out and rewind characteristics
- Exceptionally durable case and handle
- Clean contemporary styling
- Large, comfortable ergonomically-designed handle, grasp from the top or side. Allows for use with gloves



Cat. No.	Material	Width & Thickness (in.)	Length	Case Diameter	End Type	Replacement Tape Cat. No.
31-055	Blued Steel	1/8 x .060	60	12 in.	Formed hook	31-035
31-224*	Blued Steel	1/8 x .060	100	12 in.	Swivel ball end	31-040 plus 31-085
31-124*	Blued Steel	1/8 x .060	100	12 in.	Gold fish leader end	31-040 plus 31-148
31-056	Blued Steel	1/8 x .060	120	12 in.	Formed hook	31-036
31-225*	Blued Steel	1/8 x .060	200	12 in.	Swivel ball end	31-041 plus 31-085
31-125*	Blued Steel	1/8 x .060	200	12 in.	Gold fish leader end	31-041 plus 31-148
31-057	Blued Steel	1/8 x .060	240	12 in.	Formed hook	31-038
31-059*	Blued Steel	1/4 x .060	50	12 in.	Formed hook	31-050
31-058*	Blued Steel	1/4 x .060	100	12 in.	Formed hook	31-051
31-024*	Black Steel	1/8 x .060	100	12 in.	Formed hook	31-036
31-025*	Black Steel	1/8 x .060	200	12 in.	Formed hook	31-038
31-066	Stainless Steel	1/8 x .060	120	12 in.	Formed hook	31-073
31-067	Stainless Steel	1/8 x .060	240	12 in.	Formed hook	31-074
31-060*	S-Class® Nylon Jacketed Fiberglass	3/16 in. diameter	50	12 in.	Leader	31-150
31-062*	S-Class® Nylon Jacketed Fiberglass	3/16 in. diameter	50	12 in.	Eyelet	31-160
31-061*	S-Class® Nylon Jacketed Fiberglass	3/16 in. diameter	100	12 in.	Leader	31-152
31-063*	S-Class® Nylon Jacketed Fiberglass	3/16 in. diameter	100	12 in.	Eyelet	31-162
31-542*	Nylon Monofilament	3/16 in. diameter	50	12 in.	Eyelet	31-552
31-544*	Nylon Monofilament	3/16 in. diameter	100	12 in.	Eyelet	31-554
31-144*	Gold-Fish® Brass Plated Steel Coil	3/16 in. diameter	50	12 in.	Eyelet	31-141
31-145*	Gold-Fish® Brass Plated Steel Coil	3/16 in. diameter	75	12 in.	Eyelet	Use 31-133
31-090*	Zoom™ Nylon Jacketed Stainless Steel	3/16 in. diameter	50	12 in.	Eyelet	31-091
31-092*	Zoom™ Nylon Jacketed Stainless Steel	3/16 in. diameter	100	12 in.	Eyelet	31-093

\*Available in Tuff-Grip™ Pro case Mid-2004.

## Thumb Winder™ Fish Tapes

- Convenient 7 in. size can be stored in tool bag
- Durable, impact-resistant ABS case
- Easy-to-use thumb-operated rewind



Description	Cat. No.
Steel Tape – 25 ft.	31-012
Steel Tape – 50 ft.	31-010

## Tape-Pak® Fish Tapes

- Compact 8-1/2 in. case size saves space
- Convenient, durable impact-resistant case

Description	Cat. No.	Replacement Tape Cat. No.
Steel tape – 50 ft.	31-033	31-004
S-Class® – 25 ft.	31-157	—
Gold-Fish® – 25 ft.	31-143	31-140
Nylon – 25 ft.	31-540	31-550

## Rapid-Pak® Fish Tapes

- Inner rotating reel with winding knob retrieves tape faster than traditional fish tapes for increased labor savings
- Funneled tape opening reduces kinking and tape breakage
- Reversible, hinged knob for right- or left-handed rewinds
- Stationary handle for extra durability
- Textured case surface provides positive grip
- Impact-resistant plastic case



## Tape-Pak® Fish Tapes with Footage Counters

- Easy-to-read counter with magnified numbers
- Saves time and effort when working with long, concealed conduit runs



Description	Cat. No.	Replacement Tape Cat. No.
Steel tape – 100 ft. x 1/8 in. x .060 in.	31-126	31-036
Steel tape – 200 ft. x 1/8 in. x .060 in.	31-127	31-038

## Tuff-Grip™ Fish Tapes

- Large 16 in. case accommodates long tape lengths
- Large, comfortable, durable handle provides secure grip and ease of use
- Durable impact-resistant case



Description	Cat. No.	Replacement Tape Cat. No.
S-Class® with Leader – 200 ft.	31-064	31-155
S-Class® with Eyelet – 200 ft.	31-065	31-165
Zoom™ – 200 ft.	31-096	31-097

Description	Cat. No.	Replacement Tape Cat. No.
Blued Steel tape – 50 ft. x 1/8 in. x .060 in.	31-082	31-039
Blued Steel tape – 100 ft. x 1/8 in. x .060 in.	31-081	31-040
Blued Steel tape – 200 ft. x 1/8 in. x .060 in.	31-098	31-041
Fiberglass tape w/leader – 50 ft.	31-187	31-150
Fiberglass tape w/leader – 100 ft.	31-186	31-152
Fiberglass tape w/leader – 200 ft.	31-207	31-155
Fiberglass tape w/eyelet – 50 ft.	31-190	31-160
Fiberglass tape w/eyelet – 100 ft.	31-189	31-162
Fiberglass tape w/eyelet – 200 ft.	31-208	31-165
Replacement crank assembly (winder knob)	31-220	—

## Tapes without Cases

Material	Width & Thickness (in.)	Length (Ft.)	Case Diameter	End Type	Cat. No.
Blued Steel	1/8 x .045	40	For 12 in.	Formed hook	31-904
Blued Steel	1/8 x .045	100	For 12 in.	Formed hook	31-079
Blued Steel	1/8 x .060	25	For 8-1/2 in.	Formed hook	31-003
Blued Steel	1/8 x .060	50	12 in.	Formed hook	31-039
Blued Steel	1/8 x .060	60	12 in.	Formed hook	31-035
Blued Steel	1/8 x .060	100	12 in.	Formed hook	31-040
Blued Steel	1/8 x .060	120	12 in.	Formed hook	31-036
Blued Steel	1/8 x .060	200	12 in.	Formed hook	31-041
Blued Steel	1/8 x .060	240	12 in.	Formed hook	31-038
Blued Steel	1/8 x .060	500	None	Formed hook	31-3380
Black Steel	1/4 x .060	50	12 in.	Formed hook	31-050
Black Steel	1/4 x .060	100	12 in.	Formed hook	31-051
Blued Steel	1/4 x .060	200	None	Formed hook	31-052
Blued Steel	1/4 x .060	300	None	Formed hook	31-2127
Blued Steel	1/4 x .060	400	None	Formed hook	31-2128
Blued Steel	1/4 x .060	600	None	Formed hook	31-2980
Blued Steel	1/4 x .060	700	None	Formed hook	31-3379
Blued Steel	1/4 x .060	750	None	Formed hook	31-2139
Blued Steel	1/4 x .060	1,000	None	Formed hook	31-3384
Black Steel	1/8 x .060	50	8-1/2 in.	Formed hook	31-004
Stainless Steel	1/8 x .060	120	12 in.	Formed hook	31-073
Stainless Steel	1/8 x .060	240	12 in.	Formed hook	31-074
S-Class® Nylon Jacketed Fiberglass	3/16 in. diameter	50	12 in.	Leader	31-150
S-Class® Nylon Jacketed Fiberglass	3/16 in. diameter	50	12 in.	Eyelet	31-160
S-Class® Nylon Jacketed Fiberglass	3/16 in. diameter	100	12 in.	Leader	31-152
S-Class® Nylon Jacketed Fiberglass	3/16 in. diameter	100	12 in.	Eyelet	31-162
S-Class® Nylon Jacketed Fiberglass	3/16 in. diameter	125	For 12 in.	Leader	31-191
S-Class® Nylon Jacketed Fiberglass	3/16 in. diameter	125	For 12 in.	Eyelet	31-205
S-Class® Nylon Jacketed Fiberglass	3/16 in. diameter	200	16 in.	Leader	31-155
S-Class® Nylon Jacketed Fiberglass	3/16 in. diameter	200	16 in.	Eyelet	31-165
S-Class® Nylon Jacketed Fiberglass	3/16 in. diameter	300	None	Eyelet	31-2138
S-Class® Nylon Jacketed Fiberglass	3/16 in. diameter	400	None	Eyelet	31-400
S-Class® Nylon Jacketed Fiberglass	3/16 in. diameter	500	None	Eyelet	31-3370
Nylon Monofilament	3/16 in. diameter	25	8-1/2 in.	Eyelet	31-550
Nylon Monofilament	3/16 in. diameter	50	12 in.	Eyelet	31-552
Nylon Monofilament	3/16 in. diameter	100	12 in.	Eyelet	31-554
Gold-Fish® Brass Plated Steel Coil	3/16 in. diameter	25	8-1/2 in.	Eyelet	31-140
Gold-Fish® Brass Plated Steel Coil	3/16 in. diameter	50	12 in.	Eyelet	31-141
Gold-Fish® Brass Plated Steel Coil	3/16 in. diameter	50	For 12 in.	Small Eyelet	31-132
Gold-Fish® Brass Plated Steel Coil	3/16 in. diameter	75	For 12 in.	Small Eyelet	31-133
Gold-Fish® Brass Plated Steel Coil	3/16 in. diameter	100	—	Eyelet	31-142
Gold-Fish® Brass Plated Steel Coil	3/16 in. diameter	100	—	Small Eyelet	31-134
Zoom™ Nylon Jacketed Stainless Steel	3/16 in. diameter	50	12 in.	Eyelet	31-091
Zoom™ Nylon Jacketed Stainless Steel	3/16 in. diameter	100	12 in.	Eyelet	31-093
Zoom™ Nylon Jacketed Stainless Steel	3/16 in. diameter	200	16 in.	Eyelet	31-097

## Fish Tape Leaders

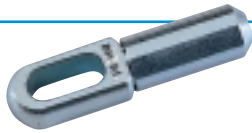


- Guides fish tape around bends in conduit
- Handles up to six 10 AWG bare wires
- Pulls up to 500 lbs.

Description	Cat. No.
Fish Tape Leader for steel or stainless steel tapes	<b>31-148</b>
Fish Tape Leader for S-Class® Fiberglass	<b>31-159</b>

## Fish Tape Swivel Ball

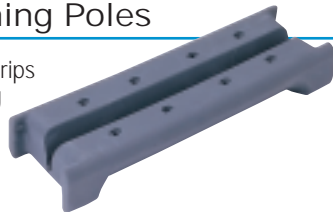
- Swivels to prevent wires from twisting during pull
- Designed for use on 1/8 in. steel or stainless steel tape
- Eyelet holds up to four 10 AWG bare wires



Description	Cat. No.
Fish Tape Swivel Ball	<b>31-085</b>

## Puller for S-Class® Fiberglass Fish Tapes and Tuff-Rod™ Fishing Poles

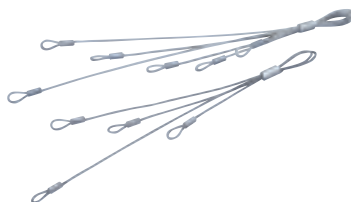
- Non-slip material securely grips fiberglass without damaging material
- Fits into standard 12 in. fish tape case opening when not in use



Description	Cat. No.
Fish Tape Puller	<b>31-170</b>

## Multi-Wire Pulling Leaders

- Pulls multiple wires at one time
- Staggered connection points prevent bunching or hang-ups in tight bends
- 500 lb. working strength at main eyelet and up to 150 lbs. with each individual eyelet



Description	Cat. No.
Multi-Wire Pulling Leader – 6-loop	<b>31-146</b>
Multi-Wire Pulling Leader – 4-loop	<b>31-147</b>

## S-Class® Fiberglass and Zoom™ Fish Tape Field Application Kits

- Crimps on new eyelet or leader in minutes
- Dies can be used with Crimpmaster™ Crimp Tool
- Connection guaranteed to withstand 500 lbs.



Description	Cat. No.
Field Application Kit includes: Crimpmaster™ Crimp Tool frame, die set, S-Class® eyelets (2), S-Class® leaders (2), Zoom™ eyelets (2) & instant adhesive	<b>31-156</b>
Die Set Kit* includes: eyelets (2), leaders (2) & instant adhesive	<b>31-164</b>
Replacement eyelets (4) for S-Class®	<b>31-158</b>
Replacement eyelets (2) for Zoom™	<b>31-094</b>
Replacement leaders (4) for S-Class®	<b>31-159</b>

\*For those who already have a Crimpmaster™ Crimp Tool

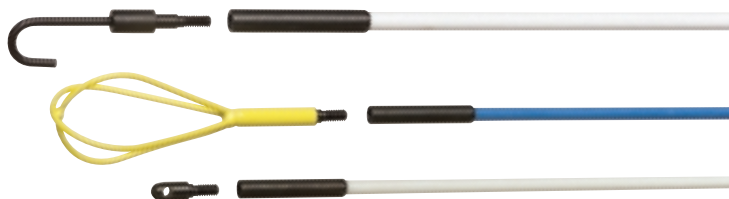
### WARNING

Always use approved safety glasses when using this product. Do not use near energized equipment. Electrical shock may occur. Make sure all power is off. Do not use pliers or other tools that may kink, damage, or weaken any round fish tapes such as S-Class®, Nylon or Zoom™. Use only a fish tape puller designed for this purpose. While fish tapes made of fiberglass, nylon or other composite materials are non-conductive, they may have a metal eyelet that is conductive and could be grounded against conduit. Do not use on live electrical circuits. Do not attempt to use fish tape that is fractured or has multiple ends. Keep the fish tape wound in the reel to prevent damage to the tape. Use this product in a safe work position to prevent loss of balance. Never remove the screws from case while fish tape is coiled inside the reel. Failure to follow instructions may result in severe bodily harm or damage to property.

## Tuff-Rod™ Fishing Poles

**New**

- Strong, lightweight, flexible extendable fiberglass rod kits
- Use to reach and pull wires over suspended ceilings, in cable trays or through interior walls
- Packaged in clear tubes for protection and long term storage



### Tuff-Rod™ Regular Flex

- 1/4 in. white fiberglass
- Extra stiffness for added control when maneuvering wires

### Tuff-Rod™ Extra Flex

- 3/16 in. blue fiberglass
- Extra flexibility for ease of use in tight spaces inside walls

### Tuff-Rod™ Extra Flex Glow

- 3/16 in. pale green luminescent fiberglass
- Glow in the dark material for easy use in attics, basements and other dim lit areas

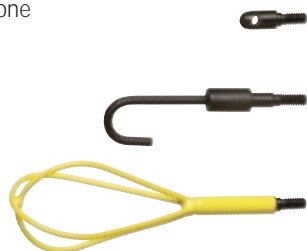
Description	Cat. No.
12 ft. kit with fixed bullet nose and threaded J hook	<b>31-611</b>
24 ft. kit with fixed bullet nose and threaded bullet nose	<b>31-612</b>
Two 4 ft. replacement rods	<b>31-616</b>
Two 6 ft. replacement rods	<b>31-617</b>

Description	Cat. No.
12 ft. kit with fixed bullet nose and threaded J hook	<b>31-621</b>
30 ft. kit with fixed bullet nose and threaded bullet nose	<b>31-623</b>
Two 4 ft. replacement rods	<b>31-626</b>
Two 6 ft. replacement rods	<b>31-627</b>

Description	Cat. No.
12 ft. kit with fixed bullet nose and threaded J hook	<b>31-631</b>
30 ft. kit with fixed bullet nose and threaded bullet nose	<b>31-633</b>
Two 4 ft. replacement rods	<b>31-636</b>
Two 6 ft. replacement rods	<b>31-637</b>

### Accessory Kits

- Includes replacement heads, one threaded bullet nose, one threaded J hook and one threaded wisp



Description	Cat. No.
3/16 in. Accessory kit	<b>31-651</b>
1/4 in. Accessory kit	<b>31-652</b>

### Repair Kits

- Includes one male threaded end, one female threaded end, one fixed bullet nose, three glue packs and free glue applicator

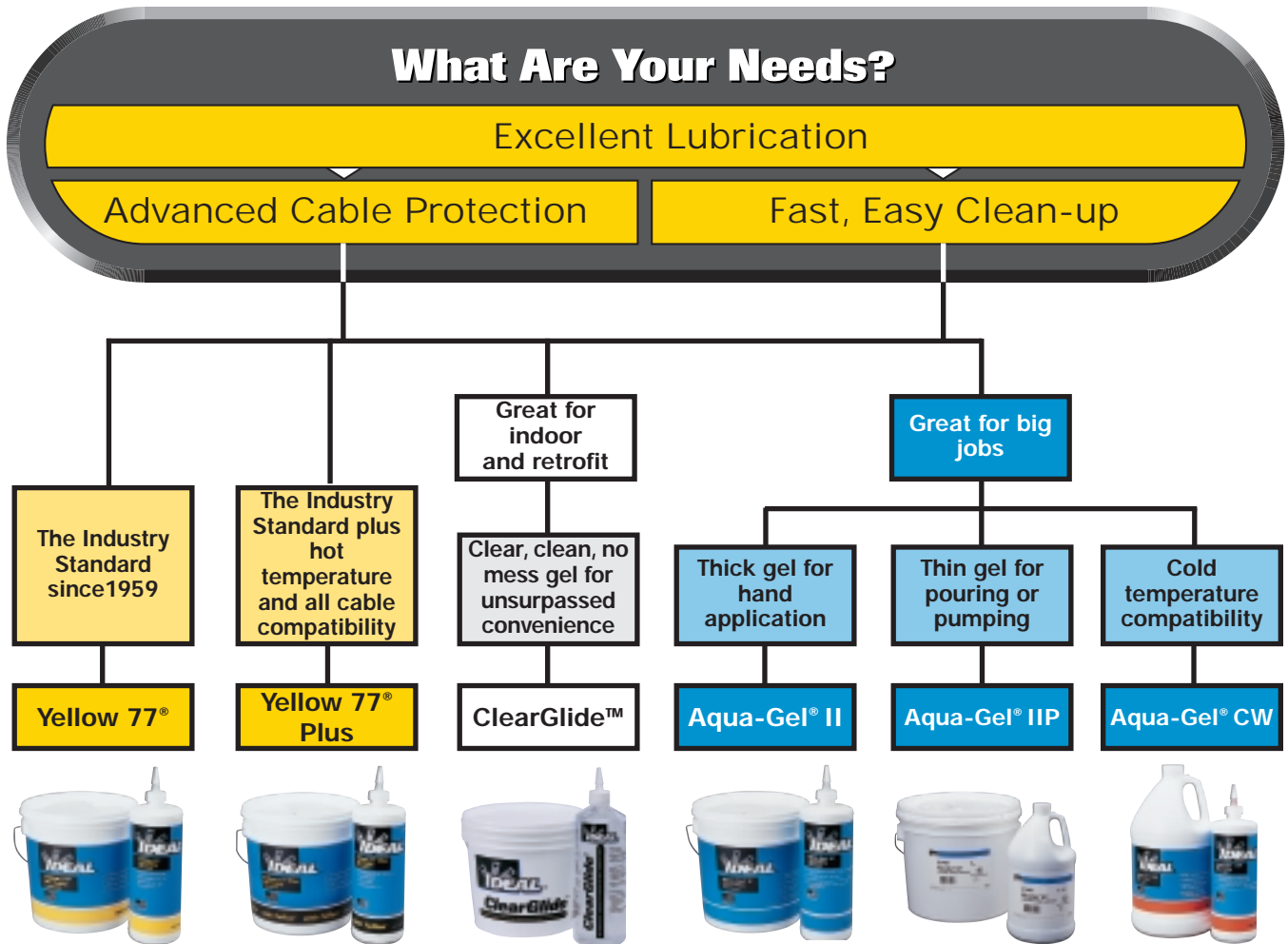


Description	Cat. No.
3/16 in. Repair kit	<b>31-641</b>
1/4 in. Repair kit	<b>31-642</b>

Fishing Poles



*Make every pull fast and easy*



Lubricants

*Wire Pulling Lubricant Selection Guide*

	Yellow 77® Plus Wire Pulling Lubricant	Yellow 77® Wire Pulling Lubricant	ClearGlide™ Wire Pulling Lubricant	Aqua-Gel® II Cable Pulling Lubricant	Aqua-Gel® IIP Cable Pulling Lubricant	Aqua-Gel® CW Cable Pulling Lubricant
Application	Utility – Construction & Maintenance	General Purpose – Construction & Maintenance	General Purpose – Construction, Maintenance & Telecommunications	Utility – Construction & Maintenance	Utility – Construction, Maintenance & Telecommunications	Cold Weather – Construction & Maintenance
Base	Wax	Wax	Polymer	Polymer	Polymer	Polymer
Average Coefficient of Friction	0.034	0.07	0.032	0.052	0.050	0.055
Temperature Range	30°F – 190°F (-1°C – 88°C)	32°F – 130°F (0°C – 54°C)	30°F – 180°F (-1°C – 82°C)	28°F – 180°F (-2°C – 82°C)	28°F – 180°F (-2°C – 82°C)	-28°F – 180°F (-33°C – 82°C)
COMPATIBILITY (Cable Types):						
Rubber	•	•	•	•	•	•
Neoprene	•	•	•	•	•	•
Nylon	•	•	•	•	•	•
PVC	•	•	•	•	•	•
High-density or cross-linked polyethylene	•	•	•	•	•	•
Low-density polyethylene	•	•	•	•	•	•
Semiconducting jacket	•	•	•	•	•	•
Hypalon	•	•	•	•	•	•

## Yellow 77® Plus Wire Pulling Lubricant

- DuPont™ TEFLON® additive provides greater lubricity than other wax-based lubricants – great for tough pulls
- Safe to use with all cable types
- Clings to cable throughout long runs, even where moisture is present
- Remains stable in high temperatures – usable from 30°F to 190°F (-1°C to 88°C)
- Dries slowly to a thin, non-conductive film that won't harden in conduit
- Easy to apply by hand or by brush
- Creamy texture applies easily and uniformly
- Homogeneous blend requires no mixing
- Won't dry out – surface coat forms to control evaporation
- Environmentally safe – non-toxic, non-flammable and non-corrosive



Description	Cat. No.
1-qt. Squeeze bottle	31-398
1-gal. Bucket	31-391
5-gal. Bucket	31-395

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## Yellow 77® Wire Pulling Lubricant

- The #1 brand of wire pulling lubricant since 1959 – the perfect general purpose lube
- Wax-based formula provides superior lubricity
- Safe to use with most cable types except low-density polyethylene and semi-conducting jackets
- Clings to cable throughout long pulls, even where moisture is present
- Won't breakdown or separate after repeated exposure to freezing temperatures
- Dries to a thin, non-conductive film
- Easy to apply by hand or by brush
- Creamy texture applies easily and uniformly
- Homogeneous blend requires no mixing
- Won't dry out – surface coat forms to control evaporation
- Environmentally safe – non-toxic, non-flammable and non-corrosive



Description	Cat. No.
1-qt. Squeeze bottle	31-358
1-qt. Tub	31-350
1-gal. Bucket	31-351
5-gal. Bucket	31-355
55-gal. Drum	31-365



## ClearGlide™ Wire Pulling Lubricant

- Clear and colorless for quick and easy clean-up – great for indoor and retrofit pulls
- Exceptional lubricity for super-fast pulls
- Polymer-based formula is perfect for all electrical and datacomm applications
- Safe to use with all cable types
- Controlled evaporation rate is ideal for shorter runs
- Remains stable over wide temperature range – usable from 30°F to 180°F (-1°C to 82°C)
- Dries to a semi-fluid film that won't clog conduit
- Easy to apply by hand, brush or pump
- Environmentally safe – non-toxic, non-flammable and non-corrosive

Description	Cat. No.
1-qt. Squeeze bottle	31-388
1-gal. Bucket	31-381
5-gal. Bucket	31-385
4 oz. Squeeze bottle in saleable 6-pack	31-389



## Aqua-Gel® II Cable Pulling Lubricant

- Polymer-based formula provides maximum tension reduction in high-stress electrical and communications cable-pulling operations
- Compatible with all cable types
- Cleans up easily with soap and water
- Clings to cable throughout long pulls
- Remains stable over wide temperature range – usable from 28°F to 180°F (-2°C to 82°C)
- Dries to a semi-fluid film that won't clog conduit
- Easy to apply by hand, brush or pump
- Environmentally safe – non-toxic, non-flammable and non-corrosive

Description	Cat. No.
1-qt. Squeeze bottle	31-378
1-gal. Bucket	31-371
1-qt. Bag (12 bags per bucket)	31-376
1/2-gal. Bag (6 bags per bucket)	31-377
5-gal. Bucket	31-375
55-gal. Drum	31-3855



## Aqua-Gel® IIP Cable Pulling Lubricant

- Features the same excellent qualities as Aqua-Gel® II Cable Pulling Lubricant with a lower viscosity for easy pouring and pumping
- Pourable formula clings to cable – eliminates hand application for a cleaner and safer job
- Compatible with all cable types
- Cleans up easily with soap and water
- Environmentally safe – non-toxic, non-flammable and non-corrosive



Description	Cat. No.
1-gal. Jug	31-421
5-gal. Bucket	31-425
55-gal. Drum	31-435



## Aqua-Gel® CW Cable Pulling Lubricant

- Features the same excellent qualities as Aqua-Gel® II Cable Pulling Lubricant with a lower temperature range for use in cold weather
- Polymer-based, cold-weather formula remains stable to -28°F (-33°C)
- Safe to use on all cable types
- Cleans up easily with soap and water
- Clings to cable throughout long pulls
- Can be diluted with water to customize viscosity for any job situation
- Well-suited for hand, pouring or pumping application
- Environmentally safe – non-toxic, non-flammable and non-corrosive



Description	Cat. No.
1-qt. Squeeze bottle	31-298
1-gal. Jug	31-291
5-gal. Bucket	31-295

## Cable Gripping Gloves

- Rubber coating provides positive grip on lubricated cable
- Comfortable fit



Description	Cat. No.
Rubber-Coated Gloves	31-417

## Duct Seal



- Seals around junction boxes, flashings and service entrances
- Permanently soft, non-toxic compound can be painted immediately after application
- Won't adversely affect other plastic materials or corrode metals

Description	Cat. No.
1 lb. Block (10 per carton)	31-601
5 lb. Block (10 per carton)	31-605



## PVC Heating Blankets



- Use to heat PVC conduit when making bends
- Thermostat control provides even heating for uniform bending
- Narrow internal wire spacing heats PVC conduit faster than other heating blankets

Conduit Type and Size	Volts	Amps	Watts/Blanket	Cat. No.
1/2 in. to 1-1/2 in. PVC conduit	120	3.2	380	74-067
2 in. to 4 in. PVC conduit	120	12	1,435	74-068

## Noalox® Anti-Oxidant



- Anti-oxidant and anti-seizing compound improves efficiency and service life of aluminum-to-aluminum and aluminum-to-copper electrical connections
- Suspended zinc particles penetrate and cut aluminum oxide
- Provides additional inter-strand and inter-conductor current paths for improved conductivity and cooler connections
- Carrier material excludes air to prevent further oxidation
- For use with all types of pressure-type wire connectors including screw-on, tap, service entrance and split-bolt
- Reduces galling and seizing and promotes good ground continuity on aluminum conduit joints

Description	Cat. No.
1/2-oz. Tube	30-024
4-oz. Squeeze bottle	30-026
8-oz. Squeeze bottle	30-030
8-oz. Brush cap	30-031
1-gal. Bucket	30-032
5-gal. Bucket	30-040





## Bender Heads

- Exceptional, durable, heat treated materials for extra strength
- Reinforced at stress points for longer life
- Markings are raised and cast into the bender body on both sides for easy visibility
- Deeply serrated step helps prevent slippage when applying force
- Grooved internal hook surface helps prevent conduit from slipping
- Flat hook surface provides stable starting point
- Desirable Benfield bending system

## Ductile Iron

- Withstands a lifetime of heavy use
- Ductile iron material is stronger than malleable iron
- Lifetime guarantee



Conduit Type and Size	Bender Only Cat. No.	Bender & Handle Cat. No.	Handle Only Cat. No.
1/2 in. EMT	74-001	74-026	74-019
3/4 in. EMT, 1/2 in. Rigid & 1/2 in. IMC	74-002	74-027	74-019
1 in. EMT, 3/4 in. Rigid & 3/4 in. IMC	74-003	74-028	74-020
1-1/4 in. EMT, 1 in. Rigid & 1 in. IMC	74-006	74-034	74-021

## Aluminum

- Lightweight aluminum for easy handling
- Strong enough for every day use



Conduit Type and Size	Bender Only Cat. No.	Bender & Handle Cat. No.	Handle Only Cat. No.
1/2 in. EMT	74-031	74-046	74-019
3/4 in. EMT, 1/2 in. Rigid & 1/2 in. IMC	74-032	74-047	74-019
1 in. EMT, 3/4 in. Rigid & 3/4 in. IMC	74-033	74-048	74-020
1-1/4 in. EMT, 1 in. Rigid & 1 in. IMC	74-036	74-035	74-021

## Bender Putter

- Steel shaft with rubber grip and conduit bender-shaped head
- Includes velour pouch to protect head



Description	Cat. No.
Bender Putter	74-999

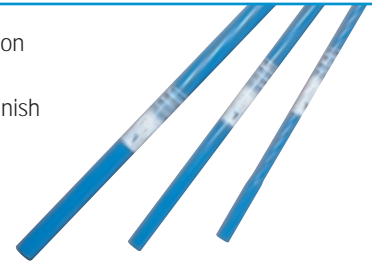
## Pocket Bender Guide

- Convenient pocket-sized reference guide
- Includes simple, concise bending techniques for precision stubs, back-to-back, offset and saddle bends
- Request free booklet #P-100



## Handles for Benders and Hickeys

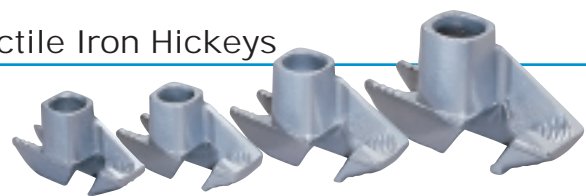
- Rugged, steel construction for long-term durability
- Baked-on blue enamel finish resists corrosion and enhances visibility
- Convenient bending guide for offset bends



Handle Size	Handle Cat. No.	For Use With		
		Ductile Iron Bender Cat. No.	Ductile Iron Hickey Cat. No.	Aluminum Bender Cat. No.
3/4 in. x 38 in.	74-019	74-001	74-010	74-031
		74-002	74-011	74-032
1 in. x 44 in.	74-020	74-003	74-012	74-033
1-1/4 in. x 54 in.	74-021	74-006	74-013	74-036

## Ductile Iron Hickeys

- High-strength ductile iron construction
- Grooved internal hook helps prevent conduit from slipping
- Lifetime replacement guarantee



Conduit Type and Size	Hickey Only Cat. No.	Handle Only Cat. No.
1/2 in. EMT	74-010	74-019
3/4 in. EMT, 1/2 in. Rigid & 1/2 in. IMC	74-011	74-019
1 in. EMT, 3/4 in. Rigid & 3/4 in. IMC	74-012	74-020
1-1/4 in. EMT, 1 in. Rigid & 1 in. IMC	74-013	74-021



## Powr-Fish® Pull-Line



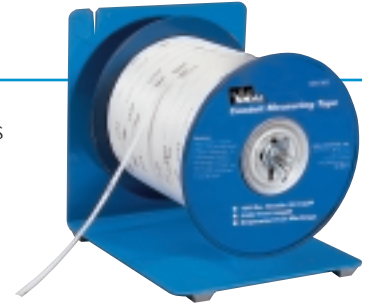
- Continuous-fiber polyline can be blown directly into conduit
- Will not rot or mildew
- Can be left in conduit for future use
- Color-coded for easy location in conduit
- Convenient packaging features pre-punched top for easy access
- \*Knotless to prevent snags in conduit

Description	Tensile Strength	Cat. No.
Powr-Fish® Pull-Line – 6,500 ft. (bucket)*	210 lb. min.	<b>31-340</b>
Powr-Fish® Pull-Line – 3,250 ft. (box)*	210 lb. min.	<b>31-341</b>
Powr-Fish® Pull-Line – 10,000 ft. (box)*	210 lb. min.	<b>31-342</b>
Powr-Fish® Pull-Line – 6,500 ft. (box)	210 lb. min.	<b>31-343</b>
Powr-Fish® Pull-Line – 2,200 ft. (bucket)*	500 lb. min.	<b>31-344</b>
Valu-Line™ Pull-Line – 6,500 ft. (bucket)	190 lb. avg.	<b>31-338</b>
Valu-Line™ Pull-Line – 13,000 ft. (bucket)	180 lb. avg.	<b>31-339</b>



Description	Tensile Strength	Cat. No.
Powr-Fish® Pull-Line – 2,200 ft. (bucket)*	500 lb. min.	<b>31-344</b>

## Conduit Measuring Tape



- Provides quick and accurate measurement of conduit runs
- Easy-to-read markings in sequential one-foot increments
- 160 lb. tensile strength
- Pulls rope through raceways without stretching
- Dispenser features built-in cutter, handle, non-skid base and adjustable reel tension
- Will not rot or mildew

Description	Cat. No.
Conduit Measuring Tape – 3,000 ft.	<b>31-347</b>
Dispenser	<b>31-349</b>

## Pro-Pull™ Rope



- Low-friction polypropylene rope slides easily through conduit
- Non-sliver surface can be handled without gloves
- Will not rot or mildew
- Rugged, lightweight construction

Rope Size	Tensile Strength*	Working Load**	Cat. No.
1/4 in. x 250 ft. Reel	1,250 lbs.	125 lbs.	<b>31-839</b>
1/4 in. x 600 ft. Reel	1,250 lbs.	125 lbs.	<b>31-840</b>
1/4 in. x 1,000 ft. Reel	1,250 lbs.	125 lbs.	<b>31-841</b>
3/8 in. x 250 ft. Reel†	2,700 lbs.	300 lbs.	<b>31-844</b>
3/8 in. x 600 ft. Reel†	2,700 lbs.	300 lbs.	<b>31-845</b>
3/8 in. x 1,200 ft. Reel†	2,700 lbs.	300 lbs.	<b>31-846</b>
1/2 in. x 250 ft. Reel†	4,200 lbs.	466 lbs.	<b>31-849</b>
1/2 in. x 600 ft. Reel†	4,200 lbs.	466 lbs.	<b>31-850</b>
1/2 in. x 1,200 ft. Reel†	4,200 lbs.	466 lbs.	<b>31-851</b>
5/8 in. x 600 ft. Reel†	6,200 lbs.	775 lbs.	<b>31-853</b>
5/8 in. x 1,200 ft. Reel†	6,200 lbs.	775 lbs.	<b>31-854</b>
3/4 in. x 300 ft. Reel†	8,500 lbs.	1,214 lbs.	<b>31-855</b>
3/4 in. x 600 ft. Reel†	8,500 lbs.	1,214 lbs.	<b>31-856</b>
3/4 in. x 1,200 ft. Reel†	8,500 lbs.	1,214 lbs.	<b>31-857</b>

\*Tensile strength indicates the point at which the rope breaks. New rope tensile strengths are based on tests of new and unused rope of standard construction in accordance with Cordage Institute Standard Test Methods Specification, August 1978.

\*\*Working load indicates the point at which the rope begins to stretch. Working loads are for rope in good condition with appropriate splices, in non-critical applications, and under normal service conditions. Working loads should be exceeded only with expert knowledge of conditions and professional estimates of risk. Working loads should be reduced where life, limb or valuable property are involved, or for exceptional service conditions such as shock loads, sustained loads, etc. †Eye splice on working end.



## Foam Carriers



- Attach to a suitable line to serve as a piston – clears out water or debris as they travel through conduit
- Durable foam construction for repeated use and long life
- For use with any type of blower or vacuum system
- Available individually or in multi-pack bags

Conduit Size (Inches)	Cat. No.	Conduit Size (Inches)	Cat. No.
1/2	31-316	2-1/2	31-322
3/4	31-317	3	31-323
1	31-318	3-1/2	31-324
1-1/4	31-319	4	31-325
1-1/2	31-320	5	31-326
2	31-321	6	31-327

Description	Cat. No.
1/2 in. Foam Carrier, 5-pack bag	31-466
3/4 in. Foam Carrier, 5-pack bag	31-467
1 in. Foam Carrier, 5-pack bag	31-468
1-1/4 in. Foam Carrier, 3-pack bag	31-469
1-1/2 in. Foam Carrier, 2-pack bag	31-470
2 in. Foam Carrier, 1-pack bag	31-471

## Line Packages



- One-piece pull line and foam tip unwind as they move through conduit
- One-piece construction for faster, easier use with no knots or foam carriers to retrieve
- Line tensile strength of 17 lbs.
- For use with any type of blower or vacuum system
- Available individually or in multi-pack bags

Conduit Size (Inches)	Color	Length (Feet)	Cat. No.
1/2	Red	75	31-328
1/2	Red	150	31-329
3/4	Yellow	75	31-330
3/4	Yellow	200	31-331
3/4	Yellow	300	31-332
3/4	Yellow	450	31-333
1	White	75	31-334
1	White	200	31-335
1	White	300	31-336
1	White	450	31-337

Description	Cat. No.
Line Package, 1/2 in. x 75 ft., 10-pack bag	31-472
Line Package, 1/2 in. x 150 ft., 10-pack bag	31-473
Line Package, 3/4 in. x 200 ft., 5-pack bag	31-475
Line Package, 3/4 in. x 300 ft., 5-pack bag	31-476
Line Package, 3/4 in. x 450 ft., 5-pack bag	31-477
Line Package, 1 in. x 200 ft., 5-pack bag	31-479
Line Package, 1 in. x 300 ft., 5-pack bag	31-480
Line Package, 1 in. x 450 ft., 5-pack bag	31-481



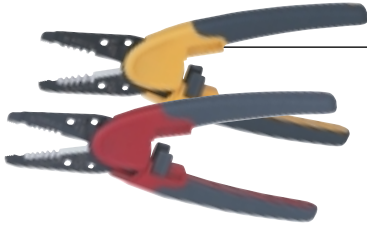
# Tools and Totes



# Engineered to strip every wire right

## Kinetic™ Reflex® T®-Stripper

The newest model from IDEAL. Ergonomic handles and Santoprene® lined Thumb-Valley™ make this the premier wire stripper in the market.



## Kinetic Super™ Wire Stripper

The ergonomic design and patented Santoprene® grip wicks away perspiration and reduces muscle fatigue. The Thumb-Valley™ guide and precision stripping holes promote the highest accuracy in the industry.

## Reflex™ Super T®-Stripper

Reduce wrist fatigue with our ergonomically designed Reflex Super T-Stripper with curved handles. These strippers feature 6/32 and 8/32 self-chasing, bolt-cutting holes and a locking pawl for safe storage.



## Reflex™ Premium T®-Stripper

Designed for total-comfort, total-control wire stripping. Ergonomic handles, designed to fit an electrician's natural grip, reduce repetitive motion fatigue. Textured, no-slip sleeves cushion thumb and finger.

## Super T®-Stripper

Traditional T-Stripper features with the added convenience of bolt-cutting holes. Curved comfort-grip handles accommodate high-volume wire stripping. A locking pawl makes for easy storage and transport.



## Premium T®-Stripper

The great benefits of the T-Stripper with added convenience and comfort. Unique contoured grips provide more comfortable wire stripping and reduce operator fatigue. Perfect for a wide variety of applications.

## T®-Stripper

The industry standard for almost 50 years. Compact, lightweight and easy to use. Features precision-ground, knife-type blades, built-in looping holes, wire cutters and a convenient plier nose.



## T®-Stripper Selection Guide

T®-Stripper	Solid Wire – Yellow Handles				Stranded Wire – Red Handles			Metric		NM Cable		
	8–16	10–18	22–30	Static Diss. 22–30	8–16	16–26	Static Diss. 16–26	.5–4mm	.75–6mm	14/2	12/2	12 & 14 2-Hole
Kinetic Reflex™	—	45-915	—	—	45-918	—	—	—	—	—	—	—
Kinetic Super™	45-715	—	—	—	45-718	—	—	—	—	—	—	—
Super Reflex™	45-615	—	—	45-617	45-618	—	45-616	—	—	—	—	45-621**
Super	45-315	—	—	45-317*	45-318	—	45-316*	45-310-341	45-315-341	—	—	—
Reflex™	—	45-415	45-417	—	45-418	45-416	—	45-425-341	—	45-448	45-449	—
Premium	—	45-215	45-217	—	45-218	45-216	—	—	—	45-248	45-249	45-247
Standard	—	45-120	45-125	—	45-124	45-121	—	45-125-341	45-120-341	—	—	45-246

\*Black handles

\*\*Dual 12-2 and 14-2 NM Cable



## Kinetic™ Super Wire Stripper



- Non-slip Santoprene™ textured grips
- New ergonomic design for maximum control
- Plier nose for holding and twisting wires
- Slide lock for safety and storage
- Thumb and finger valley makes stripping easier and more accurate
- "Shear-Cut" bolt cutters

Description	Wire Range	Cat. No.
Reflex™ Premium T®-Stripper	10-18 AWG Solid	45-415
Kinetic Super™ Wire Stripper	10-18 AWG Solid	45-715
Kinetic Super™ Wire Stripper	16-26 AWG Stranded	45-716
Kinetic Super™ Wire Stripper	22-30 AWG Solid	45-717
Kinetic Super™ Wire Stripper	8-16 AWG Stranded	45-718

## Kinetic™ Reflex® T®-Stripper Wire Stripper



- Non-slip Santoprene™ textured grips
- New ergonomic design for maximum control
- Strips 6-14 AWG solid & 8-16 AWG stranded wire

Description	Cat. No.
Kinetic™ Reflex™ T®-Stripper Wire Stripper	45-915
Kinetic™ Reflex™ T®-Stripper Wire Stripper	45-918

## Reflex™ Premium T®-Stripper Wire Strippers



- Ergonomic design for maximum comfort
- Curved handles to reduce wrist fatigue
- Sleeves that extend to stripping head to cushion thumb and fingers
- Textured, no-slip sleeves for a sure, easy grip

Description	Wire Range	Cat. No.
Reflex™ Premium T®-Stripper	10-18 AWG solid	45-415
Reflex™ Premium T®-Stripper (10 pc. clip strip)	10-18 AWG solid	45-415CS
Reflex™ Premium T®-Stripper	16-26 AWG stranded	45-416
Reflex™ Premium T®-Stripper	22-30 AWG solid	45-417
Reflex™ Premium T®-Stripper	8-16 AWG stranded	45-418
Reflex™ Premium T®-Stripper – Metric	0.5mm <sup>2</sup> -4.0mm <sup>2</sup>	45-425-341
Reflex™ Premium 14/2 NM Cable T®-Stripper	—	45-448
Reflex™ Premium 12/2 NM Cable T®-Stripper	—	45-449
Reflex™ Premium T®-Cutter	—	45-423

## Reflex™ Super T®-Stripper Wire Strippers



- 6/32 and 8/32 self-chasing screw-cutting holes
- Locking pawl for safe storage
- Ergonomic design for maximum comfort
- Curved handles to reduce wrist fatigue
- Sleeves that extend to stripping head to cushion thumb and fingers
- Textured sleeves with extra cushioning for added comfort

Description	Wire Range	Cat. No.
Reflex™ Super T®-Stripper	8-16 AWG solid	45-615
Reflex™ Super T®-Stripper w/static dissipative grips	16-26 AWG stranded	45-616
Reflex™ Super T®-Stripper w/static dissipative grips	22-30 AWG solid	45-617
Reflex™ Super T®-Stripper	8-16 AWG stranded	45-618
Reflex™ Super 12/2 & 14/2 NM Cable T®-Stripper	12-2 and 14-2 solid	45-621

## Super T®-Stripper Wire Strippers



- 6-32 and 8-32 self-chasing screw-cutting holes (not available on metric stripper)
- Curved, cushion-grip handles for ergonomic comfort
- Locking pawl to keep stripper in closed position

Description	Wire Range	Cat. No.
Super T®-5 T®-Stripper	8-16 AWG solid	45-315
Super T®-8 T®-Stripper	8-16 AWG stranded	45-318
Super T®-Stripper – Metric	0.5-4mm <sup>2</sup>	45-310-341
Super T®-Stripper – Metric	0.75-6mm <sup>2</sup>	45-315-341
Super T®-Stripper – Metric	0.5-4mm <sup>2</sup>	45-317-341

## NM Cable T®-Stripper Wire Strippers



- Easy, one-step stripping of outer jacket of NM cable – no slitting required
- Versatility to strip, cut and loop conductor wires with precision and ease
- Stripping holes for 12 or 14 AWG solid wire

Description	Cat. No.
14/2 NM Cable T®-Stripper	45-248
14/2 NM Cable T®-Stripper (10 pc. clip strip)	45-248CS
12/2 NM Cable T®-Stripper	45-249
12/2 NM Cable T®-Stripper (10 pc. clip strip)	45-249CS
Reflex™ Premium 14/2 NM Cable T®-Stripper	45-448
Reflex™ Premium 12/2 NM Cable T®-Stripper	45-449
Reflex™ Super 12/2 & 14/2 NM Cable T®-Stripper	45-621

## Super T®-Stripper Wire Strippers—Static Dissipative



- Static dissipative grips for dispersing static charge buildup through the operator to the ground (operator must be grounded via wrist strap or other grounding device)

Description	Wire Range	Cat. No.
Super T®-6 T®-Stripper w/static dissipative grips	16-26 AWG stranded	45-316
Super T®-7 T®-Stripper w/static dissipative grips	22-30 AWG solid	45-317

## Data T®-Cutter



- Cuts round communication cable and maintains cable geometry for better cable performance
- Cuts multi-pair cable up to .500 in. (12.7mm) and coaxial cable up to RG-9/U
- Suitable for soft cables (not ACSR)
- Steel reinforced center conductors can be trimmed with bolt cutting holes
- Cushioned comfort grip handles
- Locking latch keeps tool closed in pouch
- Data T®-Cutter II designed for RG-58 and RG-6 coaxial cable

Description	Cat. No.
Data T®-Cutter	45-074
Data T®-Cutter II	45-075



## NM Cable Dual-Hole T<sup>®</sup>-Stripper Wire Strippers



- Stripping holes for stripping two 12 AWG or two 14 AWG wires simultaneously
- Ability to strip both conductor wires of NM cable at one time
- Contoured, comfort grip handles on Premium model

Description	Wire Range	Cat. No.
T <sup>®</sup> -12 T <sup>®</sup> -Stripper	12 or 14 AWG solid	45-246
Premium T <sup>®</sup> -14 T <sup>®</sup> -Stripper	12 or 14 AWG solid	45-247

## T<sup>®</sup>-Stripper Wire Strippers



- Form-ground, knife-type blades for accurate, easy stripping without nicking insulation
- Built-in wire cutter and looping holes
- Convenient plier nose for extra gripping strength
- Laser-etched wire gauge for easy-to-read visibility
- Spring-loaded automatic opening
- Corrosion-resistant, black oxide finish
- Tough steel construction
- Locking tabs keep spring in place

Description	Wire Range	Cat. No.
T <sup>®</sup> -5 T <sup>®</sup> -Stripper	10-18 AWG solid	45-120
T <sup>®</sup> -6 T <sup>®</sup> -Stripper	16-26 AWG stranded	45-121
T <sup>®</sup> -7 T <sup>®</sup> -Stripper	22-30 AWG solid	45-125
T <sup>®</sup> -8 T <sup>®</sup> -Stripper	8-16 AWG stranded	45-124
T <sup>®</sup> -Stripper – Metric	0.75-6mm <sup>2</sup>	45-120-341
T <sup>®</sup> -Stripper – Metric	0.5-4mm <sup>2</sup>	45-125-341
T <sup>®</sup> -6T <sup>®</sup> -Stripper (10 pc. clip strip)	10-18 AWG solid	45-120CS
T <sup>®</sup> -5T <sup>®</sup> -Stripper (10 pc. clip strip)	16-26 AWG stranded	45-121CS

## Premium T<sup>®</sup>-Stripper Wire Strippers



- Contoured, comfort-grip handles to reduce operator fatigue

Description	Wire Range	Cat. No.
Premium T <sup>®</sup> -5 T <sup>®</sup> -Stripper	10-18 AWG solid	45-215
Premium T <sup>®</sup> -6 T <sup>®</sup> -Stripper	16-26 AWG stranded	45-216
Premium T <sup>®</sup> -7 T <sup>®</sup> -Stripper	22-30 AWG solid	45-217
Premium T <sup>®</sup> -8 T <sup>®</sup> -Stripper	8-16 AWG stranded	45-218

## T<sup>®</sup>-Cutter Wire Cutters



- Hardened steel, shear-type blades
- Spring-loaded automatic opening
- Convenient plier nose for extra gripping strength
- Corrosion-resistant, black oxide finish
- Tough steel construction
- Locking tab keeps spring in place
- Premium model features comfort-grip handles; Super model features curved cushion-grip handles; Reflex™ Premium model features ergonomic design with textured cushion-grip handles

Description	Wire Range	Cat. No.
T <sup>®</sup> -Cutter	Up to 1/2 in. O.D. fine-stranded wire and 10 AWG solid wire	45-123
Premium T <sup>®</sup> -Cutter	Up to 1/2 in. O.D. fine-stranded wire and 10 AWG solid wire	45-223
Super T <sup>®</sup> -Cutter w/static dissipative grips	Up to 1/2 in. O.D. fine-stranded wire and 10 AWG solid wire	45-323
Reflex™ Premium T <sup>®</sup> -Cutter	Up to 1/2 in. O.D. fine-stranded wire and 10 AWG solid wire	45-423

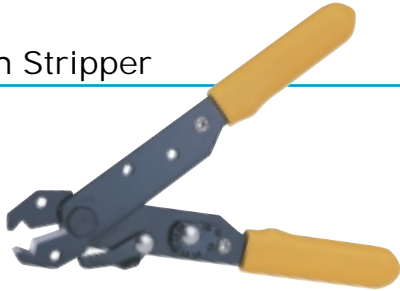
### Combo Tool



- Convenient, four-function tool features precision-ground stripping holes and knife-to-anvil cutting blades
- Crimps bare and insulated terminals
- Strips 8 to 20 AWG solid and 10 to 22 AWG stranded wire
- Cuts unhardened bolts (4-40, 6-32, 8-32, 10-24 and 10-32) and reforms threads
- Cushioned, comfort-grip handles

Description	Cat. No.
Combo Tool	30-428

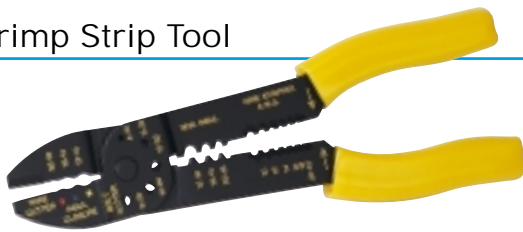
### V-Notch Stripper



- Cuts copper or aluminum wire, solid or stranded
- Rotating cam wheel adjusts to strip 10-24 AWG wire
- Looping holes for solid wire
- Locking hasp

Description	Cat. No.
V-Notch Stripper	45-101

### Multi-Crimp Strip Tool



- Cuts wire
- Crimps insulated and non-insulated wires
- Cuts bolts
- Strips 10 - 22 AWG wire

Description	Cat. No.
Multi-Crimp Strip Tool	45-778

### Seven-In-One Stripper



- Versatile, seven-function tool features precision-ground stripping blades, cushioned grips and plier nose
- Strips 8 to 16 AWG solid and 10 to 18 AWG stranded wire
- Crimps bare and insulated terminals for 10 to 22 AWG wire, RG-59 coax connectors and 7 to 8mm auto ignition connectors
- Cuts unhardened wire, bolts and screws (4-40, 6-32, 8-32, 10-24 and 10-32) and reforms threads
- Cuts stranded, solid, Romex® and U.F. wire to 8 AWG
- Reams and de-burrs conduit
- Gauges and loops wire
- Cushioned, comfort-grip handles

Description	Cat. No.
Seven-In-One Stripper	45-777

### Coax Strip and Crimp Tool



- Precision, form-ground stripping holes remove outer jacket and insulation from RG-59 and RG-6 coaxial cable
- Durable blades cut copper-coated steel conductors
- Three crimping nests for crimping F-connectors and ring terminals
- Cushioned, comfort-grip handles

Description	Cat. No.
Coax Strip & Crimp Tool	30-433
Coax Strip & Crimp Tool w/F-Connectors	30-433F

## Cable Rippers



- Slits cable sheathing before stripping wires
- Quick, clean and easy end or mid-run removal of jacket
- Convenient built-in wire gauge

Description	Cat. No.
Standard Cable Ripper	45-018
Side Entry Cable Ripper	45-118

## Handi-Grip™ Wire Skinner



- Cuts and strips insulation
- Scrapes wire and straightens kinks and sharp bends
- Strips enamel, Formvar and Formex

Description	Cat. No.
Handi-Grip™ Wire Skinner	45-021
Replacement blade set	L-554

## Swivel-Blade® Cable Stripper

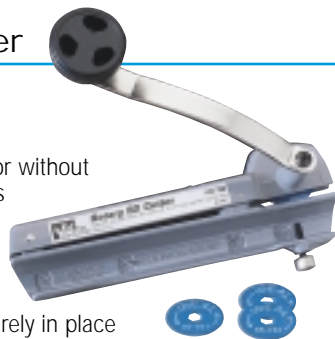


- For end or center stripping of coaxial and power cables from 3/4 in. to 1-1/2 in. O.D.
- Strips insulation to 5/32 in. including PVC, rubber, Neoprene, TEFLON®, polyethylene, Nylon, Kapton, fiberglass and fabric
- Spare blade in handle

Description	Cat. No.
Cable Stripper for 3/4 in. to 1-1/2 in. O.D.	45-129
Cable Stripper for 1/4 in. to 3/4 in. O.D.	45-128

## Rotary BX/MC Cutter

- Handles all common BX, MC and Flex cables
- Blue sapphire blade cuts armor without damage to internal conductors
- Splices cleanly through casings with only a few turns
- Thumbscrew holds cable securely in place
- Epoxy-coated to resist corrosion
- Handle knob stores up to six replacement blades



Description	Cat. No.
Rotary BX/MC Cutter	35-780
Replacement blades (5 per pack)	35-781

## Grip-N-Strip™ End Stripper



- Self-adjusting stripping blades automatically select proper position
- Strips 12 AWG solid to 20 AWG stranded PVC insulated wire
- Dual strip-length gauge marks at 3/16 in. and 5/16 in.
- Cuts up to 12 AWG solid wire
- Lightweight, ergonomic design reduces user fatigue
- Reinforced fiberglass construction
- Hardened steel blades for extra strength and longer life

Description	Cat. No.
Grip-N-Strip™ End Stripper	45-227
Replacement blade set	LB-1501

## Maxim Wire Stripper



- Uses 33 blades within each jaw to self-adjust and conform to the profile of different wire sizes and insulation densities
- Self-adjusting blades strip 10 to 26 AWG solid or stranded wire
- Built-in wire cutter
- Strip length adjusts from 1/8 in. to 3/4 in.
- Reinforced fiberglass construction

Description	Cat. No.
Maxim Wire Stripper	45-327
Replacement blade set	LA-2524

## Underground Feeder (UF) Cable Stripper



- Self-adjusting stripping blades automatically select proper position
- Strips 12 AWG solid to 14 AWG Underground Feeder (UF) Cable
- Strips Twin and Earth cable
- Open-throat construction allows unlimited strip length
- Neatly removes outer cable sheath and then inner wire sheathing to desired lengths
- Lightweight, ergonomic design reduces user fatigue
- Replaceable blades

Description	Cat. No.
Underground Feeder Cable Stripper	45-235
Replacement blade set	45-234

## Custom Stripmaster® and Custom Stripmaster® Lite Wire Strippers

- Strips 30 through 10 AWG solid or stranded wire
- Mil-spec die-type blades allow precision stripping
- Inner cutting hole sized to conductor and counter-bored holes sized to insulation
- Replaceable Grippers
- Optional short stop latch and transparent wire stop
- Cushioned, comfort grip handles
- Custom Stripmaster® Lite is 3/4's the size of Custom Stripmaster® Wire Stripper and strips 16 through 30 AWG solid or stranded wire
- Custom Stripmaster® Lite requires one-third less hand pressure for each strip actuation
- Engineering Service and made-to-order blades available. Contact factory for complete product and blade number listing



Gripper pads hold the wire securely in a centerline relationship with the blade.

Die-type blades incorporate a counter-bored hole to the insulation and an inner cutting hole sized to the conductor. This varies depending on insulation type and thickness.



### Custom Stripmaster® Wire Strippers and Die-Type Blades

Specifications — $\frac{\text{Cutting Hole Diameter}}{\text{Counterbore Diameter}}$ (Inches)											Stripper Cat. No.	Blade Only Cat. No.
Wire Size AWG												
30	28	26	24	22	20	18	16	14	12	10		
For Type E Teflon® (600V)												
								$\frac{.076}{.0935}$	$\frac{.096}{.113}$	$\frac{.119}{.136}$	45-176	L-5559
		$\frac{.023}{.039}$	$\frac{.028}{.043}$	$\frac{.034}{.052}$	$\frac{.042}{.0595}$	$\frac{.052}{.070}$	$\frac{.061}{.081}$				45-177	L-5560
$\frac{.016}{.032}$	$\frac{.019}{.035}$	$\frac{.023}{.039}$									45-178	L-5561
For Type EE Teflon® (1000V)												
								$\frac{.076}{.104}$	$\frac{.096}{.125}$	$\frac{.119}{.144}$	45-173	L-5562
		$\frac{.023}{.0465}$	$\frac{.028}{.055}$	$\frac{.034}{.0595}$	$\frac{.042}{.067}$	$\frac{.052}{.0785}$	$\frac{.061}{.089}$				45-174	L-5563
$\frac{.016}{.042}$	$\frac{.019}{.043}$	$\frac{.023}{.0465}$									45-175	L-5564
For Other Misc. Insulations												
								$\frac{.076}{.113}$	$\frac{.0937}{.138}$	$\frac{.116}{.154}$	45-170	L-5210
		$\frac{.022}{.052}$	$\frac{.0292}{.0595}$	$\frac{.035}{.0635}$	$\frac{.042}{.073}$	$\frac{.052}{.086}$	$\frac{.062}{.096}$				45-171	L-5211
$\frac{.016}{.037}$	$\frac{.020}{.040}$	$\frac{.024}{.043}$									45-172	L-5436
For Wire Wrap & Other Thin Insulated Wire												
$\frac{.012}{.020}$								Three identical holes			45-179	L-7625
$\frac{.012}{.019}$	$\frac{.014}{.023}$	$\frac{.018}{.025}$	$\frac{.024}{.033}$					Solid Wires			45-169	L-9300

Tolerances: Cutter Dia.: ± .001; Counter-bore Dia.: ± .002  
 The 45-170 Series is a Custom Stripmaster® Wire Stripper frame without the short stop latch and wire stop.

45-169 through 45-188 include grit-type pads (standard).  
 45-369 through 45-388 include file-type pads.  
 45-469 through 45-488 include parallel-type pads.

Wire Strippers



## Custom Stripmaster® Lite Wire Strippers and Die-type Blades

Specifications — $\frac{\text{Cutting Hole Diameter}}{\text{Counterbore Diameter}}$ (Inches)											Stripper Cat. No.	Blade Only Cat. No.		
Wire Size AWG														
30	28	26	24	22	20	18	16							
<b>MIL-W-16878 Type E 600V Teflon® Wire</b>														
				$\frac{.034}{.052}$	$\frac{.042}{.0595}$	$\frac{.052}{.070}$	$\frac{.061}{.081}$				45-638	LB-918		
		$\frac{.023}{.039}$	$\frac{.028}{.043}$	$\frac{.034}{.052}$	$\frac{.042}{.0595}$							45-639	LB-919	
$\frac{.016}{.032}$	$\frac{.019}{.035}$	$\frac{.023}{.039}$	$\frac{.028}{.043}$										45-640	LB-920
<b>MIL-W-16878 Type EE 1000V Teflon® Wire</b>														
				$\frac{.034}{.0595}$	$\frac{.042}{.067}$	$\frac{.052}{.0785}$	$\frac{.061}{.089}$				45-635	LB-915		
		$\frac{.023}{.0465}$	$\frac{.028}{.055}$	$\frac{.034}{.0595}$	$\frac{.042}{.067}$							45-636	LB-916	
$\frac{.016}{.042}$	$\frac{.019}{.043}$	$\frac{.023}{.0465}$	$\frac{.028}{.055}$										45-637	LB-917
<b>General Purpose</b>														
				$\frac{.035}{.0635}$	$\frac{.042}{.073}$	$\frac{.052}{.086}$	$\frac{.062}{.096}$				45-632	LB-912		
		$\frac{.022}{.052}$	$\frac{.0292}{.0595}$	$\frac{.035}{.0635}$	$\frac{.042}{.073}$							45-633	LB-913	
$\frac{.016}{.037}$	$\frac{.020}{.040}$	$\frac{.024}{.043}$	$\frac{.0292}{.0595}$										45-634	LB-914
<b>Wire Wrapping (Thin Insulation Solid Wire)</b>														
$\frac{.012}{.020}$							<b>Four holes, same size</b>			45-641	LB-921			
$\frac{.012}{.019}$	$\frac{.014}{.023}$	$\frac{.018}{.025}$	$\frac{.024}{.033}$				<b>Solid Wires</b>			45-631	LB-911			

Tolerances: Cutter Dia.: ± .001; Counterbore Dia.: ± .002. Teflon® is a registered trademark of E.I. du Pont de Nemours and Company.

## Custom Stripmaster® Wire Strippers and Die-Type Blades

Specifications — $\frac{\text{Cutting Hole Diameter}}{\text{Counterbore Diameter}}$ (Millimeters)												Stripper Cat. No.	Blade Only Cat. No.		
mm² Nom															
0.05	0.08	0.13	0.2	0.22	0.5	1.0	1.5	2.5	4.0	6.0					
<b>For Type E Teflon® (600V)</b>															
								$\frac{1.93}{2.37}$	$\frac{2.44}{2.87}$	$\frac{3.02}{3.45}$			45-176	L-5559	
		$\frac{.584}{.99}$	$\frac{.711}{1.09}$	$\frac{.863}{1.32}$	$\frac{1.07}{1.5}$	$\frac{1.33}{1.78}$	$\frac{1.55}{2.06}$						45-177	L-5560	
$\frac{.406}{.813}$	$\frac{.482}{.889}$	$\frac{.584}{.99}$												45-178	L-5561
<b>For Type EE Teflon® (1000V)</b>															
								$\frac{1.93}{2.64}$	$\frac{2.44}{3.17}$	$\frac{3.02}{3.6}$			45-173	L-5562	
		$\frac{.584}{1.17}$	$\frac{.711}{1.39}$	$\frac{.863}{1.5}$	$\frac{1.07}{1.70}$	$\frac{1.33}{1.99}$	$\frac{1.55}{2.49}$						45-174	L-5563	
$\frac{.406}{1.07}$	$\frac{.482}{1.09}$	$\frac{.584}{1.17}$												45-175	L-5564
<b>For Other Misc. Insulations</b>															
								$\frac{1.93}{2.87}$	$\frac{2.38}{3.45}$	$\frac{2.94}{3.91}$			45-170	L-5210	
		$\frac{.560}{1.33}$	$\frac{.736}{1.5}$	$\frac{.889}{1.61}$	$\frac{1.07}{1.85}$	$\frac{1.33}{2.18}$	$\frac{1.57}{2.44}$						45-171	L-5211	
$\frac{.406}{.940}$	$\frac{.508}{1.01}$	$\frac{.609}{1.09}$												45-172	L-5436
<b>For Wire Wrap &amp; Other Thin Insulated Wire</b>															
$\frac{.305}{.508}$							<b>Three identical holes</b>			45-179	L-7625				
$\frac{.305}{.482}$	$\frac{.356}{.584}$	$\frac{.457}{.635}$	$\frac{.609}{.838}$							45-169	L-9300				

Tolerances: Cutter Dia.: ± .025mm; Counterbore Dia.: ± .051mm

1-800-435-0705 for Customer Service



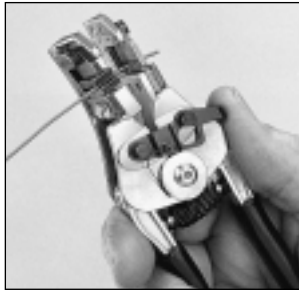
Custom Stripmaster® Lite Wire Strippers and Die-type Blades

Specifications — $\frac{\text{Cutting Hole Diameter}}{\text{Counterbore Diameter}}$ (Millimeters)								Stripper Cat. No.	Blade Only Cat. No.
Wire Size AWG									
1,5	1,0	0,5	0,22	0,2	0,13	0,08	0,05		
<b>MIL-W-16878 Type E 600V Teflon® Wire</b>									
$\frac{1,55}{2,06}$	$\frac{1,32}{1,99}$	$\frac{1,07}{1,51}$	$\frac{0,86}{1,32}$					45-638	LB-918
		$\frac{1,07}{1,51}$	$\frac{0,86}{1,32}$	$\frac{0,71}{1,09}$	$\frac{0,58}{,099}$			45-639	LB-919
				$\frac{0,71}{1,09}$	$\frac{0,58}{0,99}$	$\frac{0,48}{0,89}$	$\frac{0,41}{0,82}$	45-640	LB-920
<b>MIL-W-16878 Type EE 1000V Teflon® Wire</b>									
$\frac{1,55}{2,26}$	$\frac{1,32}{1,99}$	$\frac{1,07}{1,70}$	$\frac{0,86}{1,51}$					45-635	LB-915
		$\frac{1,07}{1,70}$	$\frac{0,86}{1,51}$	$\frac{0,71}{1,40}$	$\frac{0,58}{1,18}$			45-636	LB-916
				$\frac{0,71}{1,40}$	$\frac{0,58}{1,18}$	$\frac{0,48}{1,09}$	$\frac{0,41}{1,07}$	45-637	LB-917
<b>General Purpose</b>									
$\frac{1,57}{2,44}$	$\frac{1,32}{2,18}$	$\frac{1,07}{1,85}$	$\frac{0,89}{1,61}$					45-632	LB-912
		$\frac{1,07}{1,85}$	$\frac{0,89}{1,61}$	$\frac{0,74}{1,51}$	$\frac{0,56}{1,32}$			45-633	LB-913
				$\frac{0,74}{1,51}$	$\frac{0,61}{1,09}$	$\frac{0,51}{1,02}$	$\frac{0,41}{0,86}$	45-634	LB-914
<b>Wire Wrapping (Thin Insulation Solid Wire)</b>									
		Four holes, same size					$\frac{0,30}{0,76}$	45-641	LB-921
		Solid Wires		$\frac{0,61}{0,84}$	$\frac{0,46}{0,64}$	$\frac{0,36}{0,58}$	$\frac{0,30}{0,48}$	45-631	LB-911

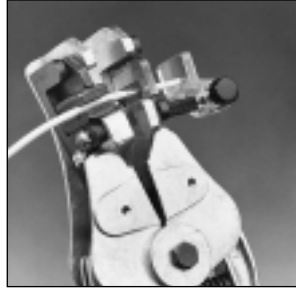
Tolerances: Cutter Dia.: ± .001; Counterbore Dia.: ± .002. Teflon® is a registered trademark of E.I. du Pont de Nemours and Company.

Wire Strippers

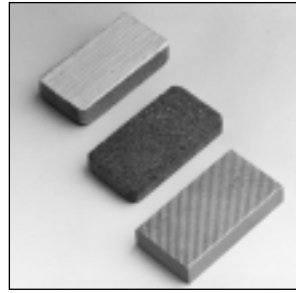




Short-stop Latch protects wire strands by limiting the stripping stroke to 5/32 in. and retains the slug until the wire is ready for terminating.



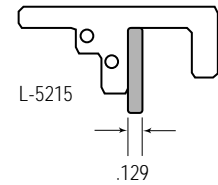
Transparent wire stop provides uniform stripping length.



Gripper Pads are available in your choice of either parallel, file or grit-type. File-type pads may be used on hard-to-grip insulations such as Kapton® and some Teflon®.

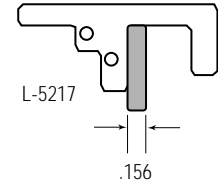
### Stationary Gripper for Red Handle Units

For 10, 12 & 14 AWG Wire



### Stationary Gripper for Black Handle Units

For 16 thru 30 AWG wire.



### Replacement Gripper Pads

For Custom Stripmaster® and Custom Steel Stripmaster® Wire Strippers			
Surface Type	Gripper Set* Cat. No.	Movable Gripper Cat. No.	Stationary Gripper (Thickness)
Grit**	LB-197	L-5212	L-5215 (.129 in.)
Grit**	LB-198†	L-5212	L-5217 (.156 in.)
File	LB-721	LB-718	LB-719 (.129 in.)
File	LB-722‡	LB-718	LB-720 (.156 in.)
Parallel	LB-730	LB-727	LB-728 (.129 in.)
Parallel	LB-731	LB-727	LB-729 (.156 in.)

### For Custom Stripmaster® Lite Wire Strippers

Surface Type	Gripper Set* Cat. No.	Movable Gripper Cat. No.	Stationary Gripper (Thickness)
Grit*	LB-1188	LB-882	LB-883 (.109 in.)
File	LB-1189	LB-1184	LB-1185 (.109 in.)
Parallel	LB-1190	LB-1186	LB-1187 (1.09 in.)

\* Gripper Set includes one movable gripper, one stationary gripper.  
 \*\* Grit pads are standard for most Custom Stripmaster® and Custom Stripmaster® Lite products.  
 † Formerly L-7954  
 ‡ Formerly L-8928. These are for use on hard-to-grip surfaces such as Kapton® and Teflon®. Gripper pad selection depends on insulation type and user preference.  
 Note: For wire gauge 10-14, use .129 in. stationary gripper. For 16-30 AWG, use .156 in. gripper.

### Optional Accessories

Short Stop Latch	Cat. No.
For Custom & Custom Steel Stripmaster® Wire Strippers	<b>L-5269</b>
For Custom Stripmaster® Lite Wire Strippers	<b>LB-1194</b>

### Replacement Frame Assemblies

For Custom Stripmaster® Wire Strippers	Cat. No.
Frame only, 10-14 AWG	<b>L-5616</b>
Frame only, 16-30 AWG	<b>L-5617</b>
Frame only, 10-14 AWG, Wire Stop and Latch	<b>L-5618</b>
Frame only, 16-30 AWG, Wire Stop and Latch	<b>L-5619</b>
Frame only, 10-14 AWG, internal spring (see note)	<b>L-9039</b>
Frame only, 16-30 AWG, internal spring (see note)	<b>L-9038</b>

Note: Frames with internal springs allow additional blade penetration pressure for difficult, and multi-layered insulation types.

For Custom Stripmaster® Lite Wire Strippers	Cat. No.
Frame only	<b>LB-895</b>
Frame only, Wire Stop and Latch	<b>LB-896</b>

For Custom Steel Stripmaster® Wire Strippers	Cat. No.
Frame only, 10-14 AWG	<b>LB-1091</b>
Frame only, 16-30 AWG	<b>LB-1092</b>
Frame only, 10-14 AWG, internal spring (see note)	<b>LB-1090</b>
Frame only, 16-30 AWG, internal spring (see note)	<b>LB-1089</b>

Note: Frames with internal springs allow additional blade penetration pressure for difficult, and multi-layered insulation types.

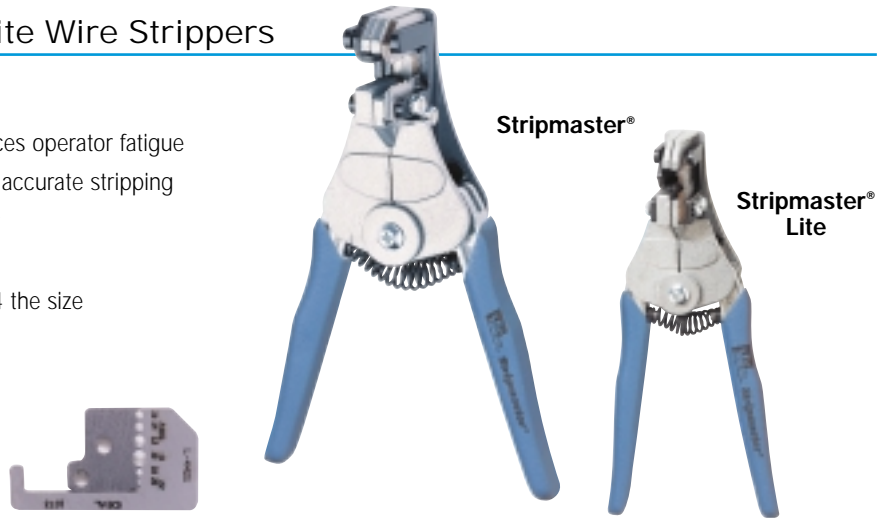
Transparent Adjustable Wire Stop Assembly	Cat. No.
For Custom & Custom Steel Stripmaster® Wire Strippers	<b>L-5270</b>
For Custom Stripmaster® Lite Wire Strippers	<b>LB-1195</b>

### Custom Steel Stripmaster® Wire Strippers and Special Flat-Blades for Ribbon and Multi-Conductor Cable

Description	Blade Gap ("x") vertical height	Blade Only Cat. No.	Frame & Blade Cat. No.
Custom Steel frame only	NA	NA	<b>LB-1091</b>
Flat blade for 26 AWG (.40mm dia.) multi-conductor	.022 in.	<b>LB-1151</b>	<b>45-890</b>
Flat blade for 24 AWG (.00mm dia.) multi-conductor	.030 in.	<b>LB-1152</b>	<b>45-891</b>
Flat blade for 22 AWG (.64mm dia.) multi-conductor	.038 in.	<b>LB-1153</b>	<b>45-892</b>
Flat blade for 20 AWG (.00mm dia.) multi-conductor	.050 in.	<b>LB-1154</b>	<b>45-893</b>
Flat blade for 18 AWG (1.02mm dia.) multi-conductor	.060 in.	<b>LB-1155</b>	<b>45-894</b>
Flat blade for 16 AWG (1.29mm dia.) multi-conductor	.075 in.	<b>LB-1156</b>	<b>45-895</b>

## Stripmaster® and Stripmaster® Lite Wire Strippers

- One-step stripping enhances productivity
- Spring-action motion increases leverage and reduces operator fatigue
- Precision-ground, knife-type blades provide clean, accurate stripping
- Sturdy die cast frame provides long-term durability
- Wire gripper holds wire securely in position
- Stripmaster® Lite designed for smaller hands — 3/4 the size of the standard Stripmaster®



### Stripmaster® Wire Strippers and Knife-Type Blades

Specifications — Stripping Hole Diameter (Inches)												Cat. No.	Replacement Blades (Pair) Cat. No.	
Wire Size AWG														
8	10	12	14	16	18	20	22	24	26	28	30			
.159	.141	.106											45-090 or 45-290	L-4419
	.144	.105	.085	.073	.073								45-091	L-4420
	.144	.113	.090	.072	.061	.048	.048						45-092* or 45-292**	L-4421
			.090	.072	.061	.039	.039					45-093	L-4422	
				.072	.061	.048	.039	.032	.026			45-097	L-4994	
						.048	.039	.032	.026	.021	.016		45-098	L-5361
.198	.167			.062	.055								45-099	L-8763

\*Boxed \*\*Blister Card

Tolerances A.001 -.005

### Stripmaster® Lite Wire Strippers and Knife-Type Blades

Specifications — Stripping Hole Diameter (Inches)												Cat. No.	Replacement Blades (Pair) Cat. No.		
Wire Size AWG															
12	14	16	18	20	22	24	26	28	30	16/18	20/22	Cutting Edge			
		.072	.061	.048	.039									45-671	LB-1001
						.032	.026	.021	.016					45-672	LB-1002
.113	.090	.072	.061 (All stranded wire)											45-673	LB-1003
.096	.085	.073	.061 (12 & 14 Solid wire, 16 & 18 Stranded wire)											45-674	LB-1004
										.072	.048	.250 Wide		45-675	LB-1005

Tolerances A.001 -.005

### Coax Stripmaster® Wire Strippers and Blades

Description	Coax Cable Type (RGU)	Repl. Blade Cat. No.	Cat. No.
Coax Stripmaster® for RG-6	RG-6	LB-740	45-262
Coax Stripmaster® for RG-58	RG-58	LB-742	45-264
Coax Stripmaster® for RG-59	RG-59	LB-743	45-265
Coax Stripmaster® for RG-62	RG-62	LB-744	45-266
Coax Stripmaster® for RG-6 QuadShield	RG-6 QuadShield	LA-3953	45-282

Coaxial Cables: two-step strip for termination, jacket and dielectric.



### Stripmaster® Wire Strippers with Rectangular Holes

Description	Cat. No.	Replacement Blades (Pair) Cat. No.
For Flat Telephone Cable (.60 in. or 1.52mm)	N/A	LB-1155
For European Flat Lamp Cord	45-089	L-8762
For SP-SPT Lamp Cord	45-095*	L-4452

\*Also strips 2- and 3-conductor low-voltage wire used in G.E. and Touchplate remote control wiring system

Optional Accessories	Cat. No.
Transparent Adjustable Wire Stop (for Stripmaster® Wire Strippers)	L-5270
Transparent Adjustable Wire Stop (for Stripmaster® Lite Wire Strippers)	LB-1195
Replacement Movable Gripper	L-1953

## Stripmaster® Wire Strippers and Knife-Type Blades

Specifications — Stripping Hole Diameter (mm)												Cat. No.	Replacement Blades (Pair) Cat. No.	Replacement Frame Cat. No.	
Wire Size AWG															
8	10	12	14	16	18	20	22	24	26	28	30				
4	3.6	2.7											45-090 or 45-290	L-4419	L-5620
	3.6	2.7	2.2	1.8									45-091	L-4420	L-5620
	3.6	2.9	2.3	1.8	1.5	1.2							45-092 or 45-292-241	L-4421	L-5620
			2.3	1.8	1.5	1.2	1						45-093	L-4422	L-5620
				1.8	1.5	1.2	1	0.8	0.7				45-097	L-4994	L-5620
						1.2	1	0.8	0.7	0.5	0.4		45-098	L-5361	L-5620
5	4.2			1.6	1.4								45-099	L-8763	L-5620

## Stripmaster® Lite Wire Strippers and Knife-Type Blades

Specifications — Stripping Hole Diameter (mm)												Cat. No.	Replacement Blades (Pair) Cat. No.	Replacement Frame Cat. No.	
Wire Size AWG															
12	14	16	18	20	22	24	26	28	30	16/18	20/22	Cutting Edge			
		1.8	1.5	1.2	1								45-671	LB-1001	LB-1421
						0.8	0.7	0.5	0.4				45-672	LB-1002	LB-1421
2.9	2.3	1.8	1.5 (All stranded wire)										45-673	LB-1003	LB-1421
2.4	2.2	1.9	1.5 (12 & 14 Solid wire, 16 & 18 Stranded wire)										45-674	LB-1004	LB-1421
										1.8	1.2	6.4 wide	45-675	LB-1005	LB-1421

## Stripmaster® Wire Strippers and Knife-Type Blades for Metric Wire

Specifications—Stripping Hole Diameter (mm)													Cat. No.	Replacement Blades (Pair) Cat. No.	Replacement Frame Cat. No.	
Wire Size (mm²)																
0.05	0.1	0.15	0.22	0.34	0.5	0.75	1	1.5	2.5	4	6	8	10			
												4.3	5	45-090-341 or 45-290-341	L-4419M	LA-2358
						1.3	1.6	1.9	2.4	3	3.6			45-092-341 or 45-292-341	L-4421M	LA-2358
0.6	0.7	0.8	0.9	1	1.1									45-098-341 or 45-298-341	L-5361M	LA-2358

## Stripmaster® Lite Wire Strippers and Knife-Type Blades for Metric Wire

Specifications—Stripping Hole Diameter (mm)									Cat. No.	Replacement Blades (Pair) Cat. No.	Replacement Frame Cat. No.		
Wire Size (mm²)													
0.05	0.1	0.15	0.22	0.34	0.5	0.75	1	1.5					
				1	1.1	1.3	1.6	1.9			45-671-341	LB-1001M	H-2909
0.6	0.7	0.8	0.9								45-672-341	LB-1002M	H-2909

Free Application Engineering Service and made-to-order Custom Stripmaster® and Stripmaster® Wire Strippers are available. Contact IDEAL INDUSTRIES, INC. for complete information at 1-800-435-0705.

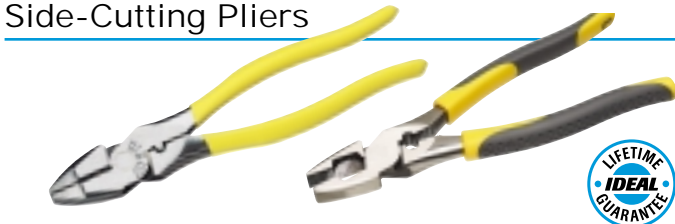
## IDEAL Grips

<b>Dipped Grips</b>	
<b>Smart-Grip™</b>	
<b>1000V Insulated Grips</b>	

**Dipped Grips** — The industry standard for decades, our vinyl-coated handles provide a secure, comfortable grip. This classic design offers traditional functionality professionals have grown familiar with. Our standard catalog part numbers come with dipped grips.

**Smart-Grip™** — Our new Smart-Grip™ pliers provide the latest innovation in material, design, durability and comfort. The underlying material is extra tough, providing durability and long life. The softer, comfort oldermold improves tool control while giving a slip-proof ergonomic alternative to our dipped handles. Our special Santoprene™ material is resistant to perspiration, water, oil and chemicals and provides a sure grip even when wet. Our grips are color-coded on the ends, so each tool can be quickly and easily identified when in a tool pouch or pocket. In addition, identification markers on the insides of the handles make it easy to find the right tool even by touch. Smart-Grip™ pliers are listed in a separate chart and have a prefix of “3” in the catalog number.

## Side-Cutting Pliers



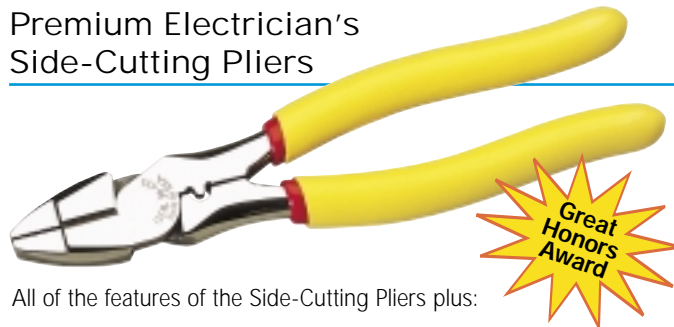
- Drop-forged, high-carbon steel construction withstands toughest applications
- Cuts hardened wire, bolts and ACSR
- Induction-hardened blades and serrated jaws for long-term durability
- High-leverage design provides 40% more cutting power
- Unique reverse rivet protects smooth action of plier movement
- Models with crimping die crimp bare and insulated terminals
- Vinyl-coated, comfort-grip handles for a secure grip
- Lifetime guarantee

Description	Cat. No.
8-1/2 in. New England nose high-leverage w/crimping die	30-420
9-1/4 in. New England nose high-leverage w/fish tape puller	35-012
9-1/4 in. New England nose high-leverage w/crimping die	30-430
9-1/4 in. New England nose high-leverage w/box joint	35-013

### Smart-Grip™

Description	Cat. No.
9-1/4 in. New England nose high-leverage w/fish tape puller	35-3012
9-1/4 in. New England nose high-leverage w/crimping die	30-3430

## Premium Electrician's Side-Cutting Pliers



All of the features of the Side-Cutting Pliers plus:

- Mirror-polished finish to resist rust and maintain premium appearance
- Double-dipped grips for extra cushioning comfort
- Lifetime guarantee



Description	Cat. No.
9-1/4 in. New England high-leverage w/fish tape puller and crimping die	30-435

## Tongue and Groove Pliers



- Patented undercut tongue and groove design ensures solid grip
- Patented reinforced flange protects against breakage
- Laser-hardened teeth remain sharp longer
- Drop-forged, high-carbon steel construction
- Vinyl-coated, comfort-grip handles for a secure grip
- Lifetime guarantee



Description	Jaw Opening (Inches)	Cat. No.
6-1/2 in. Tongue & Groove Pliers	7/8	35-426
9-1/2 in. Tongue & Groove Pliers	1-1/2	35-420
10 in. Tongue & Groove Pliers	2	35-430
12 in. Tongue & Groove Pliers	2-1/4	35-440
16 in. Tongue & Groove Pliers	4-1/4	35-460

### Smart-Grip™

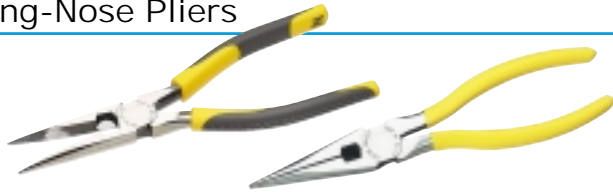
Description	Jaw Opening (Inches)	Cat. No.
9-1/2 in. Tongue & Groove Pliers w/heavy-duty grips	1-1/2	35-3420
10 in. Tongue & Groove Pliers w/heavy-duty grips	2	35-3430

**CAUTION:** Never use pliers or cutters on live electrical circuits.

**WARNING:** The cushion grips on handles are for comfort, **NOT** protection against electrical shock and should not be used on live circuits.

**WARNING:** Plastic-dipped or slip-on handles **NOT** for protection against electrical shock.

## Long-Nose Pliers



- Narrow profile head designed for working in tight areas
- Serrated jaws provide secure gripping surface
- Drop-forged, high-carbon steel construction
- Knife-to-anvil blades never need resharping
- Induction-hardened blades cut hardened wire, bolts and ASCR
- Vinyl-coated, comfort-grip handles for a secure grip
- Lifetime guarantee

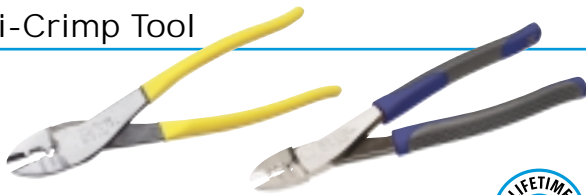


Description	Cat. No.
6 in.	35-036
7-3/4 in.	35-037
8-1/2 in.	35-038
8-1/2 in. w/Cutter & stripping holes for 12 & 14 AWG wire	35-039

### Smart-Grip™

Description	Cat. No.
7-3/4 in.	35-3037
8-1/2 in.	35-3038

## Multi-Crimp Tool



- Crimps bare or insulated terminals and splices on 10 to 22 AWG wire
- Knife-to-anvil blades never need resharping
- Excellent leverage for easy crimping and cutting
- Drop-forged, high-carbon steel construction
- Vinyl-coated handles provide a solid, comfortable grip
- Lifetime guarantee

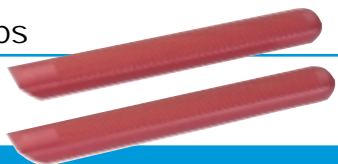


Description	Cat. No.
9-3/4 in. Multi-Crimp Tool	30-429

### Smart-Grip™

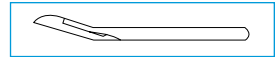
Description	Cat. No.
9-3/4 in. Multi-Crimp Tool	30-3429

## Tenite Grips



Description	Cat. No.
Replacement grips for 6 in. pliers	35-006
Replacement grips for 7 in. pliers	35-007
Replacement grips for 8 in. or 9 in. pliers	35-008

## Diagonal-Cutting Pliers



**Angled Head**  
35-029/35-3029

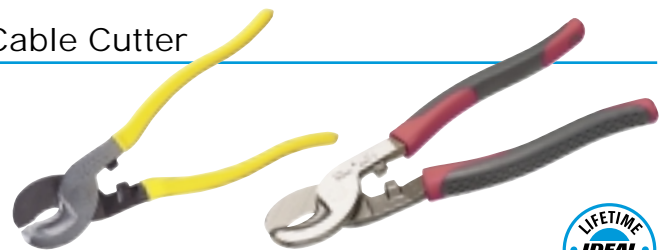
- Drop-forged, high-carbon steel construction withstands toughest applications
- Knife-to-anvil blades never need resharping
- Induction-hardened blades cut hardened wire, bolts and ASCR
- Vinyl-coated, comfort-grip handles for a secure grip
- High-leverage design provides 40% more cutting power
- Models 35-029 and 35-029HD feature a convenient angled head for hard-to-reach areas and rocking out nails
- Lifetime guarantee

Description	Cat. No.
6 in.	35-026
7 in.	35-027
8 in. High-leverage	35-028
8 in. High-leverage w/angled head	35-029

### Smart-Grip™

Description	Cat. No.
8 in. High-leverage	35-3028
8 in. High-leverage w/angled head	35-3029

## Cable Cutter



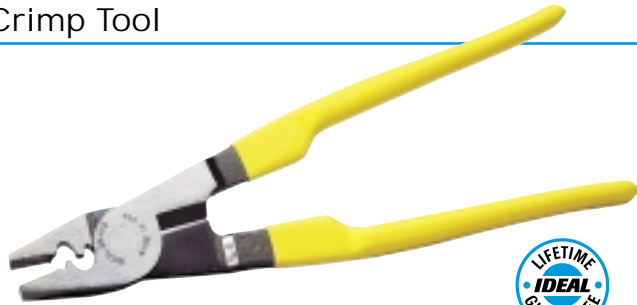
- Drop-forged, high-carbon steel construction
- Precision-ground, hardened cutting edges provide accurate cuts without cable distortion
- Designed for maximum leverage with minimum effort
- Cuts 2/0 aluminum and copper
- Vinyl-coated, comfort-grip handles
- Lifetime guarantee

Description	Cat. No.
9-1/2 in. Cable Cutter	35-052

### Smart-Grip™

Description	Cat. No.
9-1/2 in. Cable Cutter w/heavy-duty grips	35-3052

## Crimp Tool



- Crimps all IDEAL crimp sleeves
- Excellent leverage for right-angle, double-indent crimps
- Cuts and twists wire
- Vinyl-coated handles provide a solid, comfortable grip
- Lifetime guarantee

Description	Cat. No.
Crimp Tool - 10-1/4 in.	30-425

## Heavy-Duty Crimp Tool



- Crimp nests for 2, 4, 6 or 8 AWG and 8-38 mm<sup>2</sup> uninsulated terminals
- Rotating crimp nests eliminate costly die changes
- Decimal and metric wire sizes clearly marked on each crimp nest
- Comfort-grip handles for a secure grip

Description	Cat. No.
Heavy-Duty Crimp Tool	83-005

## Mechanical Indentor



- Use with aluminum (6 AWG to 4/0) and copper (8 AWG to 250 KCMIL) wires
- Adjustable crimping nests with clearly marked gauges
- Lightweight and easy to operate
- Rugged cast steel construction for long-term durability

Description	Cat. No.
Mechanical Indentor	88-843

## Ratchet Crimp Tool



- Crimps insulated or bare terminals and splices on 10 to 22 AWG wire
- Ratchet action prevents release prior to crimp connection — helps ensure uniform crimps
- Vinyl-coated handles provide a solid, comfortable grip

Description	Cat. No.
Ratchet Crimp Tool	83-001

**CAUTION:** Never use pliers or cutters on live electrical circuits.

**WARNING:** The cushion grips on handles are for comfort, **NOT** protection against electrical shock and should not be used on live circuits.

**WARNING:** Plastic-dipped or slip-on handles **NOT** for protection against electrical shock.



## Battery Powered Cable Cutter

- Cuts up to 750 KCMIL hard-drawn copper and up to 1,000 KCMIL copper and aluminum
- Hardened steel blades ensure consistent cuts and long-term durability
- Blade brush keeps debris out of blade area
- Tough plastic housing withstands rugged use
- Three-way switch allows for partial cuts, adjustments and backing off cable
- 12V battery rated for 1,000 charges
- Wrist loop provides added security when cutting overhead cable

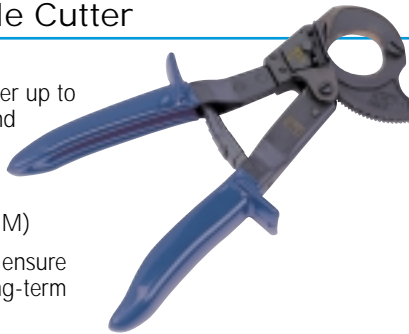


Description	Cat. No.
Battery Powered Cable Cutter Kit (Includes cutter, battery, 120V charger, carrying case)	35-064
Battery Powered Cable Cutter	35-067
Battery only	35-065
120V Battery charger	35-068
Replacement moving blade	35-071
Carrying case	35-073

Not for use on ASCR cable

## Ratcheting Cable Cutter

- Cuts hand drawn copper up to 400 KCMIL (MCM) and soft copper, aluminum and multiple conductor cable up to 600 KCMIL (MCM)
- Hardened steel blades ensure consistent cuts and long-term durability
- Rounded blade design minimizes cable distortion during cutting
- Quick release mechanism simplifies blade back-out
- Locking mechanism keeps handles closed for easy storage
- Ergonomic, non-slip handles provide excellent grip and comfort



Description	Cat. No.
400 KCMIL (MCM) Ratcheting Cable Cutter	35-056
Replacement blade	35-085

Not for cutting steel or ASCR

**CAUTION: Comfort-grip handles are not designed for protection against electrical shock. Do not use on live circuits.**

## Ratcheting Cable Cutters

- Hardened steel blades ensure consistent cuts and long-term durability
- Rounded blade design minimizes cable distortion during cutting
- Quick release mechanism simplifies blade back-out
- Locking mechanism keeps handles closed for easy storage
- High-leverage foot provides stability and leverage when making multiple cuts
- Ergonomic, non-slip handles provide excellent grip and comfort
- 750 KCMIL Ratcheting Cable Cutter is designed to cut 750 KCMIL (MCM) and smaller hard-drawn copper and aluminum cables



Description	Cat. No.
750 KCMIL (MCM) Ratcheting Cable Cutter	35-053
Replacement blade	35-057

Not for cutting steel or ASCR

**CAUTION: Comfort-grip handles are not designed for protection against electrical shock. Do not use on live circuits.**

## Telco Ratcheting Cable Cutters

- Hardened steel blades ensure consistent cuts and long-term durability
- Rounded blade design minimizes cable distortion during cutting
- Quick release mechanism simplifies blade back-out
- Locking mechanism keeps handles closed for easy storage
- High-leverage foot provides stability and leverage when making multiple cuts
- Ergonomic, non-slip handles provide excellent grip and comfort
- Telco Ratcheting Cable Cutter jaw cuts up to 2,700 pair telephone cable and Stalpath® type communications cable

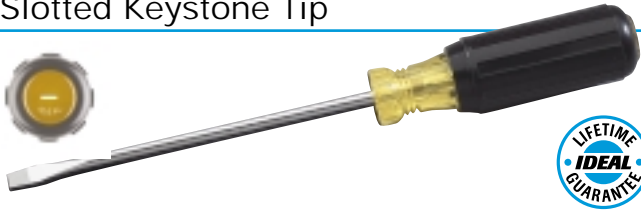


Description	Cat. No.
Telco Ratcheting Cable Cutter	35-055
Replacement blade	35-054

Not for cutting steel or ASCR

**CAUTION: Comfort-grip handles are not designed for protection against electrical shock. Do not use on live circuits.**

### Slotted Keystone Tip



- Vapor-blasted tip prevents plate chipping
- Identification mark on ends
- Precision ground tip provides secure fit in screw slot
- Nickel-chrome plating for corrosion resistance
- Tough, chrome vanadium steel shank
- Cushioned rubber grips
- Lifetime guarantee

Description	Blade Length	Total Length	Cat. No.
1/4 in. Shank and tip	3 in.	7-3/8 in.	35-173
1/4 in. Shank and tip	6 in.	10-3/8 in.	35-176
1/4 in. Shank and tip	8 in.	12-3/8 in.	35-178
1/4 in. Shank and tip	10 in.	14-3/8 in.	35-180

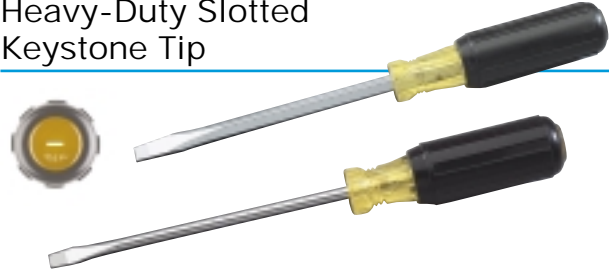
### Electrician's Cabinet Tip



- Vapor-blasted tip prevents plate chipping
- Identification mark on ends
- Precision ground tip provides secure fit in screw slot
- Nickel-chrome plating for corrosion resistance
- Tough, chrome vanadium steel shank
- Cushioned rubber grip
- Lifetime guarantee

Description	Blade Length	Total Length	Cat. No.
3/16 in. Shank and tip	3 in.	6-3/4 in.	35-183
3/16 in. Shank and tip	4 in.	7-3/4 in.	35-184
3/16 in. Shank and tip	6 in.	9-3/4 in.	35-186
3/16 in. Shank and tip	8 in.	11-3/4 in.	35-188
3/16 in. Shank and tip	10 in.	13-3/4 in.	35-190

### Heavy-Duty Slotted Keystone Tip

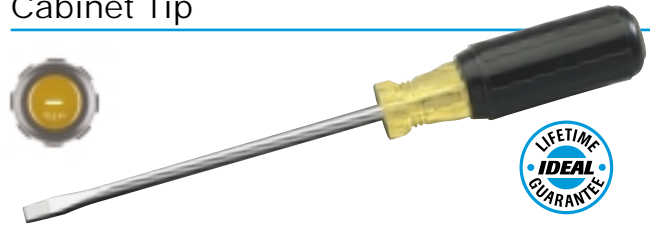


- Larger shank for heavy-duty applications
- Identification mark on ends
- Vapor-blasted tip prevents plate chipping
- Precision ground tip provides secure fit in screw slot
- Square-shank models offer wrench-assisted turning
- Tough, chrome vanadium steel shank
- Cushioned rubber grips
- Lifetime guarantee

Square Shank	Blade Length	Total Length	Cat. No.
1/4 in. Shank and tip	4 in.	8-3/8 in.	35-154
5/16 in. Shank and tip	6 in.	11 in.	35-156
3/8 in. Shank and tip	8 in.	13 in.	35-158

Round Shank	Blade Length	Total Length	Cat. No.
1/4 in. Shank and tip	1 in.	3-3/8 in.	35-161
1/4 in. Shank and tip	4 in.	8-3/8 in.	35-164
5/16 in. Shank and tip	6 in.	11 in.	35-166
3/8 in. Shank and tip	8 in.	13 in.	35-168

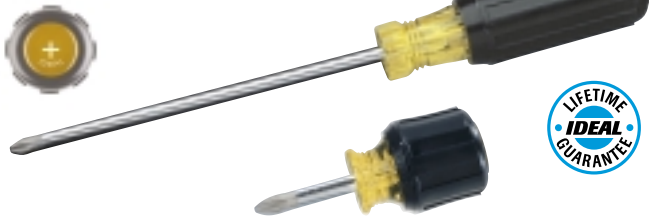
### Heavy-Duty Electrician's Cabinet Tip



- Large diameter shank for tough applications
- Identification marks on ends
- Vapor-blasted tip prevents plate chipping
- Precision ground tip provides secure fit in screw slot
- Nickel-chrome plating for corrosion resistance
- Tough, chrome vanadium steel shanks
- Cushioned rubber grip
- Lifetime guarantee

Description	Blade Length	Total Length	Cat. No.
1/4 in. Shank and tip	4 in.	8-3/8 in.	35-150
1/4 in. Shank and tip	6 in.	10-3/8 in.	35-151
1/4 in. Shank and tip	8 in.	12-3/8 in.	35-152
1/4 in. Shank and tip	10 in.	14-3/8 in.	35-153

## Phillips Head



- Vapor-blasted tip prevents plate chipping
- Identification mark on ends
- Nickel-chrome plating for corrosion resistance
- Tough, chrome vanadium steel shank
- Cushioned rubber grip
- Lifetime guarantee

Description	Blade Length	Total Length	Cat. No.
#1 Tip and 1/4 in. Shank	1 in.	3-3/8 in.	35-191
#2 Tip and 3/16 in. Shank	3 in.	6-3/4 in.	35-193
#2 Tip and 1/4 in. Shank	4 in.	8-3/8 in.	35-194
#2 Tip and 1/4 in. Shank	6 in.	10-3/8 in.	35-195
#3 Tip and 5/16 in. Shank	6 in.	11 in.	35-196

## Square-Recess Tip



- Precise tip for square-recess screws
- Color-coded handle for easy identification
- Nickel-chrome plating for corrosion resistance
- Tough, chrome vanadium steel shank
- Cushioned rubber grip
- Lifetime guarantee

Description	Color Code	For Screw Sizes	Cat. No.
#0 x 4 in.	Yellow	3, 4	35-690
#1 x 4 in.	Green	5, 6, 7	35-691
#1 x 8 in.	Green	5, 6, 7	35-692
#2 x 4 in.	Red	8, 9, 10	35-693
#2 x 8 in.	Red	8, 9, 10	35-694
#3 x 4 in.	Black	12, 14	35-695
#3 x 8 in.	Black	12, 14	35-696

## 5-Piece Screwdriver Set

### Includes:

- 1/4 in. x 6 in. HD Cabinet
- 1/4 in. x 4 in. Square Shank HD Keystone
- 5/16 in. x 6 in. Keystone
- 3/16 in. x 6 in. Cabinet
- Phillips #2 x 4 in.
- Heavy Duty Vinyl Pouch



Description	Cat. No.
5-Piece Screwdriver Set	35-297

## 8-Piece Screwdriver Set

### Includes:

- 1/4 in. x 6 in. HD Cabinet
- 1/4 in. x 4 in. Square Shank HD Keystone
- 1/4 in. x 4 in. HD Keystone
- 5/16 in. x 6 in. Keystone
- 3/16 in. x 3 in. Cabinet
- 3/16 in. x 6 in. Cabinet
- Phillips #1 x 3 in.
- Phillips #2 x 4 in.
- Heavy Duty Vinyl Pouch



Description	Cat. No.
8-Piece Screwdriver Set	35-298

## 7-in-1 Twist-a-Nut™ Screwdriver/Nutdriver



- Includes universal Wire-Nut® wrench in handle to help install twist-on wire connectors
- Accepts connectors from every major manufacturer in addition to IDEAL
- Includes #1 & #2 Phillips, 1/4 in. & 3/16 in. slotted, 1/4 in. & 5/16 in. Nutdriver
- #35-909 includes #1 & #2 Square Recess in place of #1 & #2 Phillips
- Twist-a-Nut™ handle is interchangeable with new conduit deburrer head (#35-096) and 6-in-1 Tap (#35-922)

Description	Cat. No.
7-in-1 Twist-a-Nut™ Screwdriver/Nutdriver	35-908
7-in-1 Twist-a-Nut™ Screwdriver/Nutdriver with square	35-909

### Replacement Bits

Description	Cat. No.
1/4 in. slotted – #2 Phillips	35-911
3/16 in. slotted – #1 Phillips	35-912
1/4 in. slotted – #2 Square Recess	35-913
3/16 in. slotted – #1 Square Recess	35-914
#15 & #10 Torx®	35-915

Torx® is a trademark of Camcar division of Textron, Inc.

## 10-in-1 Screwdriver/ Nutdriver



- Includes 1/4 in. slotted, #2 Phillips, 3/16 in. slotted, #1 Phillips, #1 & #2 square recess, #15 and #10 Torx® and 5/16 in. & 1/4 in. Nutdriver
- Cushion grip for comfort and performance

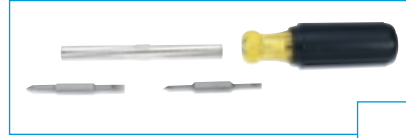
Description	Cat. No.
Screwdriver/Nutdriver	35-910

### Replacement Bits

Description	Cat. No.
1/4 in. slotted – #2 Phillips	35-940
3/16 in. slotted – #1 Phillips	35-941
#1 & #2 Square Recess	35-942
#15 & #10 Torx®	35-943

Torx® is a trademark of Camcar division of Textron, Inc.

## 5-in-1 Screwdriver/Nutdriver



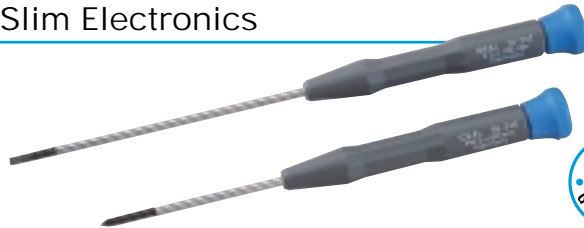
- Contains: 5/16 in. nutdriver, #1 Phillips, #2 Phillips, 9/32 in. slotted and 3/16 in. slotted
- Cushion grip for performance and comfort

Description	Cat. No.
5-in-1 Screwdriver/Nutdriver	35-905

### Replacement Bits

Description	Cat. No.
#1 Phillips – 3/16 in. slotted	LA-4123
#2 Phillips – 9/32 in. slotted	LA-4124

## Slim Electronics

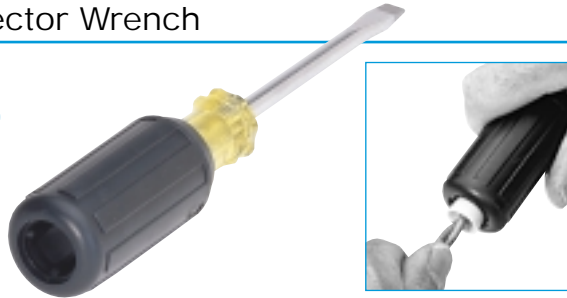


- Designed for maximum handling comfort when working in tight areas
- Ball-ended handle with guiding point
- Vapor-blasted tip prevents plate chipping
- Nickel-chrome plating for corrosion resistance
- Tough, chrome vanadium steel shank
- Lifetime guarantee



Description	Cat. No.
3/32 in. x 2-1/2 in. Cabinet tip	36-240
3/32 in. x 3 in. Cabinet tip	36-241
1/8 in. x 4 in. Cabinet tip	36-242
1/8 in. x 6 in. Cabinet tip	36-243
5/32 in. x 4 in. Cabinet tip	36-244
5/32 in. x 6 in. Cabinet tip	36-245
#0 – 1/8 in. x 2-1/2 in. Phillips head	36-246
#1 – 3/16 in. x 3-1/4 in. Phillips head	36-247
7-Piece Set includes one each of 36-240 thru 36-246	36-248
4-Piece Set includes one each of 36-240, -241, -242 & -246	36-249

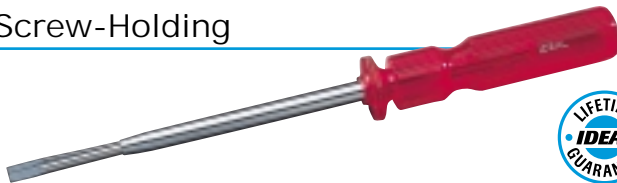
## Connector Wrench



- Convenient wrench socket in end of handle for installing Wire-Nut® Wire Connectors 74B® and 76B®
- Vapor-blasted tip prevents plate chipping
- Precision ground tip provides secure fit in screw slot
- Nickel-chrome plating for corrosion resistance
- Tough, chrome vanadium steel shank
- Cushioned rubber grip
- Lifetime guarantee

Description	Cat. No.
1/4 in. x 4 in. – Mechanic's style	30-331
3/16 in. x 6 in. – Electrician's style	30-333

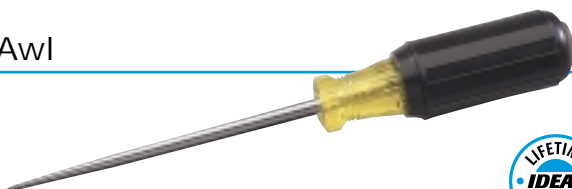
## Screw-Holding



- Split blade wedges into screw slot when collar is extended
- Holds screw in place when installing in hard to reach locations
- Tough, chrome vanadium steel shank
- Lifetime guarantee

Description	Cat. No.
3/16 in. x 4 in.	35-404
3/16 in. x 6 in.	35-406
3/16 in. x 8 in.	35-408

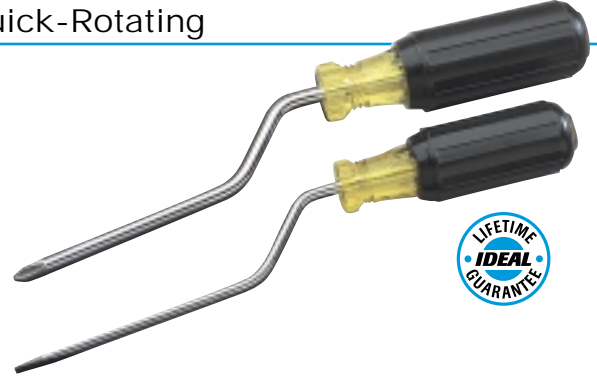
## Awl



- Heavy-duty construction for piercing, punching and scribing
- Identification mark on end
- Cushioned rubber grip
- Lifetime guarantee

Description	Cat. No.
Awl	35-202

## Quick-Rotating



- Ideal for threading screws in switches, fixtures and anchors
- Identification mark on ends
- One-handed crank action for quick and easy use
- Vapor-blasted tip prevents plate chipping
- Precision ground tip provides secure fit in screw slot
- Nickel-chrome plating for corrosion resistance
- Tough, chrome vanadium steel shank
- Cushioned rubber grip
- Lifetime guarantee

Description	Total Length	Cat. No.
3/16 in. Shank and tip	8-3/4 in.	35-200
#2 Tip and 1/4 in. shank	9-3/4 in.	35-203

## Twist-a-Nut™ Conduit Deburring Tool



- Deburrs inside and outside edges of 1/2 in., 3/4 in. and 1 in. thin wall conduit
- Hooded tip tightens EMT fitting set screws without slipping
- Head removes and is interchangeable with IDEAL 7-in-1 Twist-a-Nut™ Screwdriver shaft (#35-908)
- Head can be used in drill or cordless screwdriver
- Universal Wire-Nut® wrench in handle end eases installation of twist-on connectors
- Lifetime guarantee (excludes blades)



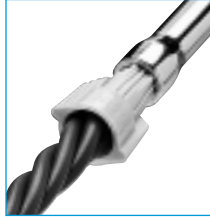
Description	Cat. No.
Conduit Deburring Tool	35-083
Conduit Deburring Tool - head only	35-096
Replacement Blades (2/pack)	35-097



## Nutmaster® Nutdriver



- Long, hollow shank handles longer bolts
- Identification and color coding on ends
- Nickel/chrome plated to resist rust and corrosion
- Cushioned rubber grips
- Models 35-292 and 35-295 fit Twister® Wire Connectors
- Lifetime guarantee



Description	Color	Cat. No.
3/16 in. x 3-1/4 in.	Black	35-290
1/4 in. x 3-1/4 in.	Red	35-291
5/16 in. x 3-1/4 in.	Yellow	35-292
11/32 in. x 3-1/4 in.	Green	35-293
3/8 in. x 3-1/4 in.	Blue	35-294
7/16 in. x 4 in.	Brown	35-295
1/2 in. x 4 in.	Red	35-296

## 7-Piece Nutdriver Set

### Includes:

- 3/16 in. x 3-1/4 in.
- 1/4 in. x 3-1/4 in.
- 5/16 in. x 3-1/4 in.
- 11/32 in. x 3-1/4 in.
- 3/8 in. x 3-1/4 in.
- 7/16 in. x 4 in.
- 1/2 in. x 4 in.



Description	Cat. No.
7-Piece Nutdriver Set	35-299

**CAUTION:** Never use pliers or cutters on live electrical circuits.

**WARNING:** The cushion grips on handles are for comfort, **NOT** protection against electrical shock and should not be used on live circuits.

**WARNING:** Plastic-dipped or slip-on handles **NOT** for protection against electrical shock.

## Six-in-One Twist-a-Nut™ Tapping Tool



- Forms new threads, re-forms burred threads and cleans out obstructions
- Reversible, high-carbon tap with three clearly marked thread sizes on each end
- Handle is interchangeable with 7-in-1 Screwdriver (35-908) and Conduit Deburrer (35-083)

Description	Cat. No.
6-32, 8-32 & 10-32 on one tapping side, 10-24, 12-24 & 1/4-20 on the other	35-922

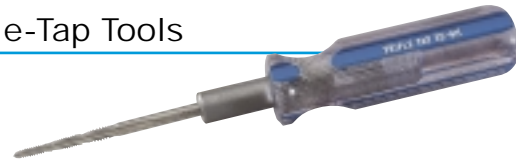
## Six-in-One Tapping Tool



- Forms new threads, re-forms burred threads and cleans out obstructions
- Reversible, high-carbon tap with three clearly marked thread sizes on each end

Description	Cat. No.
6-32, 8-32 & 10-32 on one tapping side, 10-24, 12-24 & 1/4-20 on the other	35-413

## Triple-Tap Tools



- Cleans and chases burred threads
- Taps three hole sizes

Color Code	Thread Sizes	Cat. No.
Blue	10/24, 8/32, & 6/32	35-411
Orange	10/32, 8/32, & 6/32	35-412

## Replacement Taps

Thread Sizes	Replacement Tap Cat. No.
10/24, 8/32, & 6/32	35-421
10/32, 8/32, & 6/32	35-422
10/24, 12/24 & 1/4-20	35-423
Twist-a-Nut™ Shaft assembly includes: Collar, 35-422 & 35-423	35-923



## Automatic Blade Lock Measuring Tape

- Blade automatically stays out when extended
- Push button for smooth blade retraction
- Comfortable, shock-resistant rubber grip



Description	Cat. No.
Auto-Lock™ Tape Measure - 25 ft.	35-242

## Magentic Measuring Tape

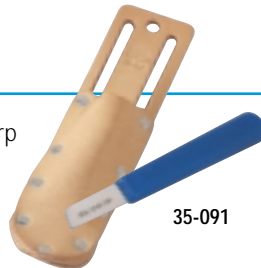
- Strong magnetic tip for one person measurement
- Durable nylon coated blade
- Full rubber jacket protects case



Description	Cat. No.
Mag-Tape™ Tape Measure - 25 ft.	35-238

## Cable Splicing Knife

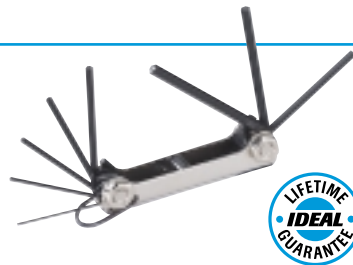
- High carbon steel blade remains sharp and cuts easily through many insulation types
- Comfortable, full size, no slip handle for easy use



Description	Cat. No.
Cable Splicing Knife and Leather Holder	35-091
Leather Knife Holder Only	35-092

## Hex-Key Sets

- 8650 steel construction
- One-piece, chrome-plated handle
- Internal tension spring and belt loop
- Lifetime guarantee



Description	Cat. No.
3 in. handle w/eight 2-in. keys (.050 in., 1/16 in., 5/64 in., 3/32 in., 7/64 in., 1/8 in., 9/64 in. & 5/32 in.)	35-145
4 in. handle w/nine 3-in. keys (5/64 in., 3/32 in., 7/64 in., 1/8 in., 9/64 in., 5/32 in., 3/16 in., 7/32 in. & 1/4 in.)	35-146
5-1/4 in. handle w/five 5-in. keys (3/16 in., 7/32 in., 1/4 in., 5/16 in. & 3/8 in.)	35-147

## Utility Knife

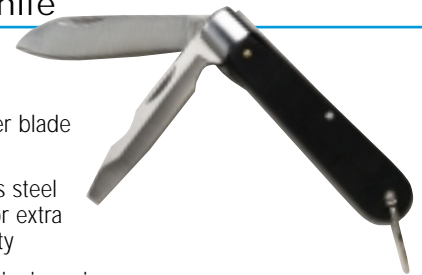
- Quick-change retractable blade system — no disassembly required
- Built in pull-line cutter
- Non-slip soft comfort grip
- Slide out blade storage compartment
- Includes three blades



Description	Cat. No.
Utility Knife	35-300
Replacement blade — Universal	35-301

## Electrician's Knife

- 2-1/4 in. spearpoint blade and screwdriver blade that locks in position
- High carbon stainless steel blade construction for extra strength and durability
- Notched blade for skinning wires
- Durable Buyrate® non-slip handle
- Brass liners



Description	Cat. No.
Electrician's Knife	35-285

## Hawkbill Knife

- 2-1/4 in. curved, high-carbon stainless steel blade locks in position
- Durable Buyrate® non-slip handle
- Brass liners



Description	Cat. No.
Hawkbill Knife	35-286

## Lineman's Jack Knife

- 2-1/4 in. High-carbon steel, stainless steel sheepfoot blade locks in position
- Durable Buyrate® non-slip handle
- Brass liners



Description	Cat. No.
Lineman's Jack Knife	35-287

## Torpedo Level

- 9 in. aluminum frame with magnetic and V-grooved edges
- White windows provide easy reading of plumb level and 45° mitre in dim lighting



Description	Cat. No.
9 in. Torpedo Level	35-205

## Fiberglass-Handled Hammers

- Drop-forged, tempered-steel polished head
- Strong, shock-absorbent fiberglass handle
- Long, straight claws simplify removal of electrical fixtures
- Comfortable, perforated Neoprene grips
- Lifetime guarantee



Description	Cat. No.
18 oz. x 12-1/2 in. Fiberglass-handled Hammer	35-210
20 oz. x 12 in. Fiberglass-handled Hammer	35-212

## Electric Engraving Tool

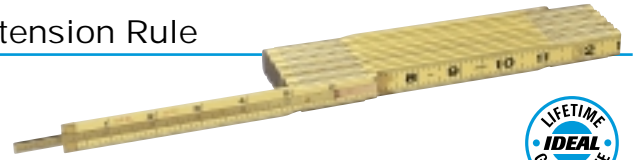
- Low-cost, industrial-quality marker quickly and easily engraves metal, glass, stone, ceramics, plastics, hard rubber, wood and many other hard materials
- Unique design reduces bouncing and provides smooth, easy writing
- Operates at 7,200 strokes per minute
- Stroke adjusts to vary depth of mark
- Includes carbide-tipped point for normal markings
- Diamond point available for engraving extra-hard materials (50 to 64 Rockwell, scale C)



Description	Cat. No.
Engraver w/carbide-tipped point — 120V, 60 Hz	11-111
Engraver w/carbide-tipped point & 3-conductor grounded cord & plug — 120V, 60 Hz	11-113
Engraver w/carbide-tipped point — 220V, 50 Hz	11-115
Carbide-tipped replacement point	11-200
Diamond replacement point	11-201

## Extension Rule

- Opens to 6 ft. with graduated 6 in. brass extension
- Markings at 1/16 in. increments with stud markings every 16 in.
- Embedded and sealed markings resist abrasion
- Hardwood slat construction with brass strike plates
- Positive-locking, spring-actuated folding joints
- Lifetime guarantee



Description	Cat. No.
Extension Rule w/inside read	35-220
Extension Rule w/outside read	35-221

## Rotary BX/MC Cutter

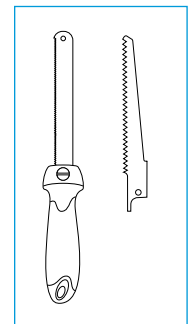
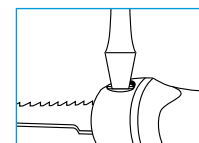
- Handles all common BX, MC and Flex cables
- Blue sapphire blade cuts armor without damage to internal conductors
- Splices cleanly through casings with only a few turns
- Thumbscrew holds cable securely in place
- Epoxy-coated to resist corrosion
- Handle knob stores up to six replacement blades



Description	Cat. No.
Rotary BX/MC Cutter	35-780
Replacement blades (5 per pack)	35-781

## Jab Saw

- Includes replaceable bi-metal wallboard blade
- Holds all reciprocating blades and hack-saw blades
- Ergonomic grip



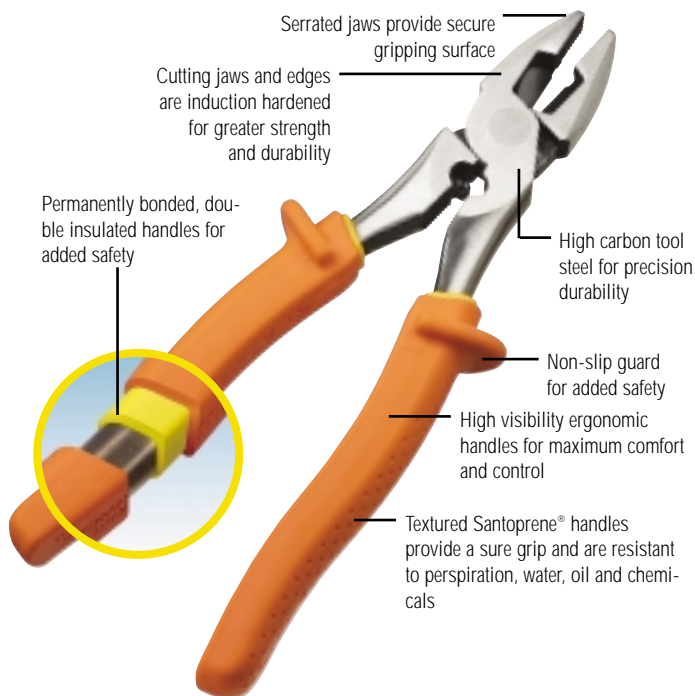
Description	Cat. No.
Jab Saw	35-275
Replacement blade	36-088

## Insulated Tools

The IDEAL insulated tool line creates a perfect blend of safety, comfort and precision functionality. Each tool features double insulated Santoprene® handles with a soft, easy-to-grip outer surface. In addition to the ergonomic qualities found in our tools, the insulated coating process acts as an 'at-a-glance' safety check. If the orange outer coating reveals any of the inner yellow surface, an electrician will know that this tool needs to be replaced.

### Pliers

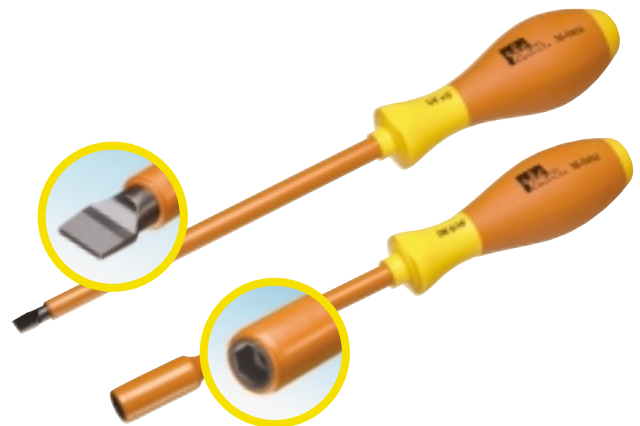
- First UL tested and listed insulated tools available
- 1000 Volt certified (1000V AC, 1500V DC)
- Meets ASTM F1505-01 and IEC 60 900 standards
- Meets OSHA requirements for insulated tools (29 CFR 1910)



### Screwdrivers

IDEAL insulated screwdrivers and nutdrivers are individually tested and VDE certified to 1000V AC (1500V DC). Each one is designed and tested to meet ASTM F1505-01, EN, DIN, and IEC 60 900 test standards.

- Ergonomic cushioned grips provide 40% more torque than conventional handles, even when wearing gloves
- Tempered blades finished with black oxide and super hardened for maximum quality
- Precision ground tips provide secure fit for less spin-out
- Meets OSHA requirement (29 CFR 1910) for insulated tools



**Warning** Whenever possible, always de-energize lines and equipment prior to working on or around them. 1000V insulated tools are designed only to reduce the chance of injury where the tool may make contact with an energized source. Work around energized circuits should only be done when absolutely necessary and only by qualified technicians. Property damage, personal injury or death may result if the following warnings are not heeded:

- Do not use any insulated tool if the insulation cracks, breaks or becomes damaged in any way. Destroy all dual-layer tools if the inner yellow layer shows through the orange outer layer.
- Do not touch the uninsulated portion of an insulated tool or any conductive object when either might contact an energized source.
- Tools must be kept clean and dry for proper insulating properties.
- Always inspect insulated tools before use.
- Use additional protection by wearing protective clothing and approved eye protection.
- Always use tools that are specifically designed for the task.
- **These tools meet UL 22PP, ASTM F1505-01 and IEC 60900 standards for insulated tools.**
- **Always follow OSHA 1910 S and NFPA 70E safety requirements when doing electrical work.**

### REGULATIONS

#### Testing:

- Every 1000V insulated tool we sell is individually tested to ensure no failure when subjected to live current.

#### UL and VDE Certification:

- Listed below are some of the tests we perform in order to pass certification:
  - Tools are immersed in water for 24 hours, then tested under current for 3 minutes to ensure no current leakage or sparkover occurs.
  - After being stored for 168 hours at -40° C (-40° F), tools are dropped to ensure no damage from impact.
  - After being stored for 168 hours at +70° C (158° F), a tensile load is applied to ensure the grip is firmly bonded to the tool.
  - Tools are subjected to flame for 10 seconds to ensure no flammability of the insulating material.

#### OSHA Regulations:

*OSHA 1910.335(a)(2)(i)* When working near exposed energized conductors or circuit parts, **each employee shall use insulated tools** or handling equipment if the tools or handling equipment might make contact with such conductors or parts.

*OSHA 1910.335 (a)(1)(i)* Employees working in areas where there are potential electrical hazards **shall be provided with, and shall use,** electrical protective equipment that is appropriate for the specific parts of the body to be protected and for the work to be performed.

**Make sure you are in compliance by providing and using IDEAL insulated tools!**

## 25-Piece Journeyman Kit



### 25-Piece Journeyman Insulated Kit – 35-9302

Includes:	Cat. No.
Reflex™ Super T®-Stripper	45-9615
Wire Stripper Cutter	45-9120
9-1/2 in. Side Cutting Linesman Pliers	30-9430
8 in. Diagonal Cutting Pliers w/angled head	35-9029
8-1/2 in. Long-Nose Pliers	35-9038
10 in. Tongue and Groove Pliers	35-9430
9-1/2 in. High-Leverage Cable Cutter	35-9052
9-3/4 in. Multi-Crimp Tool	30-9429
1/8 in. x 3 in. Screwdriver	35-9320
3/16 in. x 5 in. Screwdriver	35-9321
1/4 in. x 6 in. Screwdriver	35-9323
5/16 in. x 6 in. Screwdriver	35-9324
3/8 in. x 8 in. Screwdriver	35-9325
#1 Phillips Tip Screwdriver	35-9310
#2 Phillips Tip Screwdriver	35-9311
#3 Phillips Tip Screwdriver	35-9312
3/16 in. Hex Nutdriver	35-9330
1/4 in. Hex Nutdriver	35-9331
5/16 in. Hex Nutdriver	35-9332
3/8 in. Hex Nutdriver	35-9333
7/16 in. Hex Nutdriver	35-9334
1/2 in. Hex Nutdriver	35-9335
Knife	35-9340
VoltSensor™	61-063
Fuse Puller	34-002
Heavy-Duty Soft Tool Case	35-9352

## 9-Piece Basic Kit



### 9-Piece Basic Insulated Kit – 35-9300

Includes:	Cat. No.
Reflex™ Super T®-Stripper	45-9615
9-1/2 in. Side Cutting Linesman Pliers	30-9430
8 in. Diagonal Cutting Pliers w/angled head	35-9029
8-1/2 in. Long-Nose Pliers	35-9038
9-1/2 in. High-Leverage Cable Cutter	35-9052
3/16 in. x 5 in. Screwdriver	35-9321
1/4 in. x 6 in. Screwdriver	35-9323
#2 Phillips Tip Screwdriver	35-9311
Fuse Puller	34-002
Heavy-Duty Soft Tool Case	35-9350

## Insulated Screwdrivers



Description	Cat. No.
#1 x 3 in. Phillips Screwdriver	35-9310
#2 x 4 in. Phillips Screwdriver	35-9311
#3 x 6 in. Phillips Screwdriver	35-9312
1/8 in. x 4 in. Slotted Screwdriver	35-9320
3/16 in. x 5 in. Slotted Screwdriver	35-9321
7/32 in. x 7 in. Slotted Screwdriver	35-9322
1/4 in. x 6 in. Slotted Screwdriver	35-9323
5/16 in. x 7 in. Slotted Screwdriver	35-9324
3/8 in. x 8 in. Slotted Screwdriver	35-9325

Screwdriver Kit	Cat. No.
9-Piece Insulated Screwdriver Kit (Includes all 9 screwdrivers listed above.)	35-9303



## 17-Piece Standard Kit



### 17-Piece Standard Insulated Kit – 35-9301

Includes:	Cat. No.
Reflex™ Super T®-Stripper	45-9615
9-1/4 in. Side Cutting Linesman Pliers	30-9430
8 in. Diagonal Cutting Pliers w/angled head	35-9029
8-1/2 in. Long-Nose Pliers	35-9038
10 in. Tongue and Groove Pliers	35-9430
9-1/2 in. High-Leverage Cable Cutter	35-9052
1/8 in. x 3 in. Screwdriver	35-9320
3/16 in. x 5 in. Screwdriver	35-9321
1/4 in. x 6 in. Screwdriver	35-9323
5/16 in. x 6 in. Screwdriver	35-9324
3/8 in. x 8 in. Screwdriver	35-9325
#1 Phillips Tip Screwdriver	35-9310
#2 Phillips Tip Screwdriver	35-9311
#3 Phillips Tip Screwdriver	35-9312
VoltSensor™	61-063
Fuse Puller	34-002
Heavy-Duty Soft Tool Case	35-9351

## Insulated Nutdrivers



Description	Cat. No.
3/16 in. Hex Nutdriver	35-9330
1/4 in. Hex Nutdriver	35-9331
5/16 in. Hex Nutdriver	35-9332
3/8 in. Hex Nutdriver	35-9333
7/16 in. Hex Nutdriver	35-9334
1/2 in. Hex Nutdriver	35-9335
9/16 in. Hex Nutdriver	35-9336

Nutdriver Kit	Cat. No.
7-Piece Insulated Nutdriver Kit (Includes all 7 Nutdrivers listed above.)	35-9304

## Insulated Pliers



Description	Cat. No.
9-1/4 in. Side Cutting Linesman Pliers	30-9430
8 in. Diagonal Cutting Pliers w/angled head	35-9029
8-1/2 in. Long-Nose Pliers	35-9038
9-1/2 in. High-Leverage Cable Cutter	35-9052
9-3/4 in. Multi-Crimp Tool	35-9429
10 in. Tongue and Groove Pliers	35-9430
Premium T®-Stripper	35-9120
Reflex™ Super T®-Stripper	35-9615

## Insulated Knife



Description	Cat. No.
Insulated Electrician's Knife	30-9340

## Cases

Description	Cat. No.
Tool Roll Case for Basic Kit (35-9300)	35-9350
Tool Roll Case for Standard Kit (35-9301)	35-9351
Tool Roll Case for Journeyman Kit (35-9302)	35-9352
Hard Case for Screwdriver Kit (35-9303)	35-9353
Hard Case for Nutdriver Kit (35-9304)	35-9353



22PP

LISTED

Our pliers are the first to have Insulated Tools successfully passed UL certification!

Recognized as the undisputed leader in product safety and certification, UL has developed rigorous safety standards for 1000V insulated tools. In order to carry the UL listing mark, tools must be tested by UL to meet these standards.

Only tools that carry the UL Listed mark have passed this stringent certification process. Why accept anything else?



## 5-in-1 Non-Conductive Screwdriver/Nutdriver



- 1000V AC, 1500V DC rated per ASTM F 1505-94 and EN 60900 (IEC900)
- Contains: 1/4 in. slotted, 3/16 in. slotted, #1 Phillips, #2 Phillips and 1/4 in. nutdriver
- Accommodates most standard 1/4 in. hex bits
- Powerful magnet securely holds bits in place
- Handle will store up to 8 standard bits

Description	Cat. No.
5-in-1 Non-Conductive Screwdriver/Nutdriver	<b>35-9905</b>
1/4 in. Slotted Replacement Bit	<b>LA-4125</b>
3/16 in. Slotted Replacement Bit	<b>LA-4126</b>
#1 Phillips Replacement Bit	<b>LA-4127</b>
#2 Phillips Replacement Bit	<b>LA-4128</b>

## Fuse Pullers

- Molded of tough, high-impact nylon for greater strength
- No-slip gripping surface and protective finger stops for added safety



Description	Cat. No.
Small Puller for 0 to 30A/250V, 1/4 in. to 1/2 in. dia. fuses; 5 in. long	<b>34-015</b>
Large Puller for 0 to 100A/250V & 0 to 60A/600V, 9/16 in. to 1 in. dia. fuses; 7-1/4 in. long	<b>34-016</b>

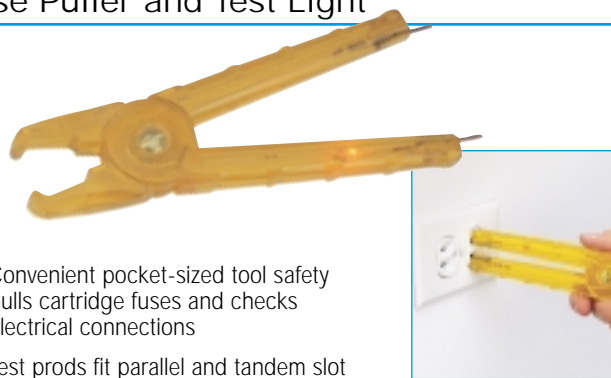
## Safe-T-Grip® Fuse Pullers



- Maximum efficiency and convenience for removing or replacing cartridge-type fuses
- Three sizes handle fuses ranging from 0 to 600A
- Fully insulated, high-dielectric, glass-filled polypropylene construction
- Notched handles provide safe, no-slip grip
- Clearly marked amperage ranges
- Exceed MIL specifications

Description	Cat. No.
Small Puller for 250V, 9/32 in. to 1/2 in. dia. fuses; 5 in. long	<b>34-001</b>
Medium Puller for 0 to 100A/250V & 600V, 1/2 in. to 1 in. dia. fuses; 7-1/2 in. long	<b>34-002</b>
Large Puller for 31 to 600A/250V & 31 to 400A/600V, 3/4 in. to 2-1/2 in. dia. fuses; 11-3/4 in. long	<b>34-003</b>

## Fuse Puller and Test Light

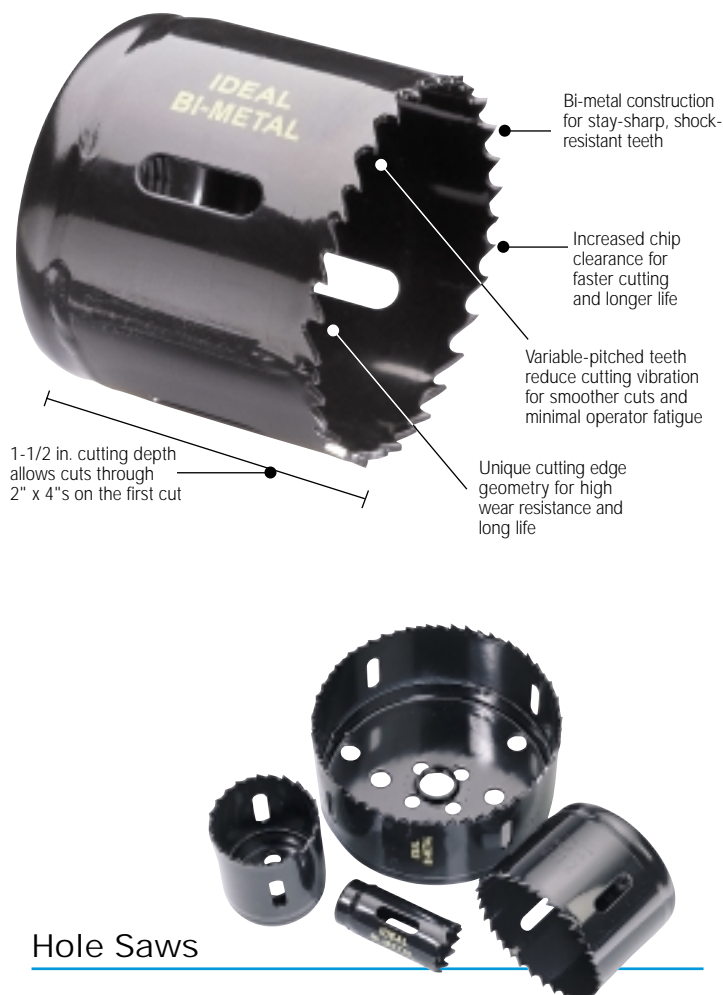


- Convenient pocket-sized tool safely pulls cartridge fuses and checks electrical connections
- Test prods fit parallel and tandem slot receptacles
- Built-in resistors limit current flow to eliminate false indication
- For 9/16 in. to 1 in. fuses
- For use on fuses to 100A/250V and 60A/600V
- Test capacity from 100V to 600V AC/DC

Description	Cat. No.
Fuse Puller & Test Light only	<b>34-012</b>
30 in. Lead w/test prod	<b>34-013</b>
30 in. Lead w/insulated clip	<b>34-014</b>

## Advanced Bi-Metal Hole Saws

Introducing the new line of hole saws from IDEAL. With re-engineered bi-metal construction, IDEAL hole saws now have a cutting longevity that rivals any in the industry. The new cutting tooth geometry works faster and longer on tough applications like stainless steel. Increased chip removal enhances wood cutting performance by increasing speed and reducing wear on the teeth. An extensive set of sizes and kits are available to meet all your cutting needs. When it comes to performance, IDEAL is your source for hole saws.



### Hole Saws

- 1-1/2 in. cutting depth cuts through 2 x 4's on the first cut
- Cut wood, plastic and machinable metal including: nail-embedded wood, plywood, pipe and stainless steel
- High speed steel teeth
- Fit standard arbors and feature knock-out slots for easy core removal
- 4 to 6 teeth per inch variable pitch, positive rake, M3 bi-metal tooth design

Saw Diameter (Inches)	Pipe Tap Size* (Inches)	Pipe Entrance Size** (Inches)	Cat. No.
<b>Use Arbor No. 35-391 or 35-392 or 35-393</b>			
9/16	—	—	35-340
5/8	—	—	35-341
11/16	—	—	35-342
3/4	—	3/8	35-343
13/16	—	—	35-344
7/8	3/4	1/2	35-345
15/16	—	—	35-346
1	—	—	35-347
1-1/16	—	—	35-348
1-1/8	1	3/4	35-349
1-3/16	—	—	35-350
<b>Use Arbor No. 35-394</b>			
1-1/4	—	—	35-351
1-5/16	—	—	35-352
1-3/8	—	1	35-353
1-7/16	—	—	35-354
1-1/2	1-1/4	—	35-355
1-9/16	—	—	35-356
1-5/8	—	—	35-357
1-11/16	—	—	35-358
1-3/4	1-1/2	1-1/4	35-359
1-13/16	—	—	35-360
1-7/8	—	—	35-361
2	—	1-1/2	35-362
2-1/16	—	—	35-363
2-1/8	—	—	35-364
2-1/4	2	—	35-365
2-5/16	—	—	35-366
2-3/8	—	—	35-367
2-1/2	—	2	35-368
2-9/16	—	—	35-369
2-5/8	2-1/2	—	35-370
2-3/4	—	—	35-371
2-7/8	—	—	35-372
3	—	2-1/2	35-373
3-1/8	—	—	35-374
3-1/4	3	—	35-375
3-3/8	—	—	35-376
3-1/2	—	—	35-377
3-5/8	—	3	35-378
3-3/4	3-1/2	—	35-379
3-7/8	—	—	35-380
4	—	—	35-381
4-1/8	—	3-1/2	35-382
4-1/4	—	—	35-383
4-3/8	—	—	35-384
4-1/2	—	4	35-385
4-3/4	4-1/2	—	35-386
5	—	—	35-387
5-1/2	—	—	35-388
5-3/4	—	—	35-389
6	—	—	35-390

All pipe sizes listed in the Pipe Tap Size and Pipe Entrance Size columns are standard industry sizes. All pipes are sized by the nominal inside diameter.

\*The sizes listed provide the necessary information whenever a pipe is to be threaded into tanks, boilers, etc. To ensure the best results, the hole should be reamed before tapping with a reamer having a taper of 3/4 in. per foot.

\*\*The sizes listed provide the necessary information for any given pipe size to have sufficient clearance to pass through beams, walls, bulkheads, etc.

## Hole Saw Arbors



35-391 35-392 35-393 35-394 35-395

- 1/4 in. high-speed drill pilots with 118° split-point for fast, accurate hole starting
- Durable steel construction

Shank Size	Thread Size	Chuck Size	Cat. No.
1/4 in. Round	1/2-20	1/4	35-391
3/8 in. Hex	1/2-20	3/8	35-392
7/16 in. Hex	1/2-20	1/2	35-393
7/16 in. Hex	5/8-18	1/2	35-394
7/16 in. Hex	1/2-20	1/2	35-395*

\*Can be used for all hole saw sizes



### Replacement Pilot Drills for Hole Saw Arbors

Description	Cat. No.
4-1/2 in. x 1/4 in. – Fits 35-391, 35-393, 35-394 & 35-395 arbors	35-397
2-3/4 in. x 1/4 in. – Fits 35-392 arbor	35-398

## Hole Saw Arbor Extension

- For use with 7/16 in. arbors
- 12 in. length



Shank Size	Cat. No.
12" Hole Saw Arbor Extension for 7/16 in. Arbors	35-396

## Hole Saw Kits

### Master Electrician's Hole Saw Kit

- Electrical sizes for pipe and conduit through 4 in.
- 13-piece kit
- Metal case



#### Kit 35-401 Includes:

Description	Cat. No.
Hole Saw sizes 7/8 in., 1-1/8 in., 1-3/8 in., 1-3/4 in., 2 in., 2-1/2 in., 3 in., 3-5/8 in., 4-1/8 in., 4-1/2 in. Also includes arbor models 35-391, 35-393 & 35-394	35-401

### Electrician's Hole Saw Kit

- Electrical sizes for pipe and conduit through 2 in.
- 8-piece kit
- Durable plastic case



#### Kit 35-400 Includes:

Description	Cat. No.
Hole Saw sizes 7/8 in., 1-1/8 in., 1-3/8 in., 1-3/4 in., 2 in. & 2-1/2 in. Also includes arbor models 35-393 & 35-394	35-400

### Maintenance Hole Saw Kit

- Designed for electricians and industrial and general-purpose maintenance needs.
- Plumbing and electrical sizes for pipe and conduit through 2 in.
- 13-piece kit
- Durable plastic case



#### Kit 35-399 Includes:

Description	Cat. No.
Hole Saw sizes 3/4 in., 7/8 in., 1-1/8 in., 1-3/8 in., 1-1/2 in., 1-3/4 in., 2 in., 2-1/4 in. & 2-1/2 in. Also includes arbor models 35-391, 35-393 & 35-394 and extension for 7/16 in. arbor shank	35-399

## Tungsten Carbide Grit Hole Saws

- Superior resistance to heat, wear and abrasion
- Unique snag resistant tooth/gullet design results in superior cutting performance
- The choice for abrasive or thin material including cast iron, drywall, plaster, stucco, ceramics, fiberglass, hardwood and composites
- 1-1/2 in. cutting depth



Description	Cat. No.
<b>Use Arbor No. 35-391, 35-392 or 35-393</b>	
3/4 in. Carbide Grit Hole Saw	35-343CG
7/8 in. Carbide Grit Hole Saw	35-345CG
1-1/8 in. Carbide Grit Hole Saw	35-349CG
<b>Use Arbor No. 35-394</b>	
1-3/8 in. Carbide Grit Hole Saw	35-353CG
1-1/2 in. Carbide Grit Hole Saw	35-355CG
1-3/4 in. Carbide Grit Hole Saw	35-359CG
2 in. Carbide Grit Hole Saw	35-362CG
2-1/8 in. Carbide Grit Hole Saw	35-364CG
2-1/4 in. Carbide Grit Hole Saw	35-365CG
2-1/2 in. Carbide Grit Hole Saw	35-368CG
2-5/8 in. Carbide Grit Hole Saw	35-370CG
3 in. Carbide Grit Hole Saw	35-373CG
3-1/4 in. Carbide Grit Hole Saw	35-375CG
3-5/8 in. Carbide Grit Hole Saw	35-378CG

## Step Bits



35-511 35-512 35-513 35-514 35-515 35-516 35-517

- Self-starting point eliminates starter holes or punches, even on curved surfaces (except 35-514)
- Unique double-fluted design for balanced cuts and cooler operation
- Exceptional titanium coating stands up to wood, plastic and metal – extends bit life compared to standard step bits

Bit Diameters Sizes (Inches)	No. of Hole Sizes	Step Increments (Inches)	Step Thickness (Inches)	Shank Dia. (Inches)	Cat. No.
1/8 to 1/2	13	1/32	1/8	1/4	35-511
1/4 to 3/4	9	1/16	1/8	3/8	35-512
1/4 to 7/8	11	1/16	1/16	3/8	35-513
1/2 to 1	8	1/16	1/8	3/8	35-514
1/4 to 1-1/8	16	1/16	1/16	3/8	35-515
3/16 to 1/2	6	1/16	3/8	1/4	35-516
1/4 to 1-3/8	10	1/32	1/16 to 1/4	3/8	35-517

## Adjustable Can Light Hole Saw

- Adjustable from 2-1/2 in. to 7 in. (63mm - 177mm)
- Cuts drywall and ceiling tile
- Self-sharpening carbide coated cutting blade
- Includes 2 dust shields to minimize clean up



*Drill not included.*

Description	Cat. No.
Adjustable Can Light Holesaw	35-398

## Recessed Lighting Hole Saws

- Durable tungsten carbide grit cutting edge
- Quick and easy installation of recessed lighting
- Cut abrasive materials such as ceiling tile, lath and plaster
- Use with arbor 35-394



Description	Cat. No.
4-3/8 in. Carbide Grit Hole Saw	35-384CG
6-3/8 in. Carbide Grit Hole Saw	35-601CG
6-5/8 in. Carbide Grit Hole Saw	35-602CG
6-7/8 in. Carbide Grit Hole Saw	35-603CG

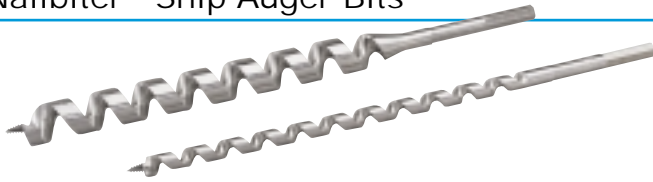
## Electrician's Step Bit Kit

- Durable blow-molded case securely holds and protects bits
- Kit includes four step bits (35-511, 35-513, 35-515 and 35-517)
- Kit provides a solution for every electrical hole size between 1/8 in. and 1-3/8 in.



Description	Cat. No.
Electrician's Step Bit Kit	35-520

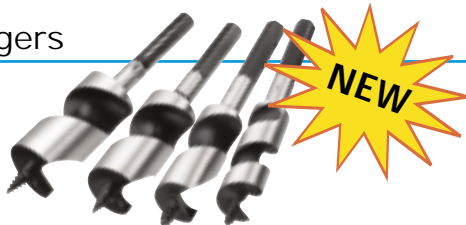
## Nailbiter™ Ship Auger Bits



- Bites through nails, wood and other materials with an average 30% longer life on treated wood
- Full-length, heat-treat and temper provide excellent cutting-area hardness and longer shank durability
- Precision designed and cut screw point to resist point breakage
- Sharpenable

Power Ship Augers Bit Length 17 in. – 12 in. Twist Description	Shank Diameter (Inches)	Cat. No.
Power Ship Auger – 1/2 in.	5/16	35-820
Power Ship Auger – 5/8 in.	7/16	35-821
Power Ship Auger – 11/16 in.	7/16	35-822
Power Ship Auger – 3/4 in.	7/16	35-823
Power Ship Auger – 13/16 in.	7/16	35-824
Power Ship Auger – 7/8 in.	7/16	35-825
Power Ship Auger – 15/16 in.	7/16	35-826
Power Ship Auger – 1 in.	7/16	35-827
Power Ship Auger – 1-1/8 in.	7/16	35-828
Power Ship Auger – 1-1/4 in.	7/16	35-829
Short Ship Augers Bit Length 7-1/2 in. – 5 in. Twist Description	Shank Diameter (Inches)	Cat. No.
Short Ship Auger – 5/8 in.	5/16	35-810
Short Ship Auger – 11/16 in.	5/16	35-811
Short Ship Auger – 3/4 in.	5/16	35-812
Short Ship Auger – 13/16 in.	5/16	35-813
Short Ship Auger – 7/8 in.	5/16	35-814
Short Ship Auger – 1 in.	5/16	35-815
Short Ship Auger – 1-1/8 in.	7/16	35-816
Short Ship Auger – 1-1/4 in.	7/16	35-817

## Mini™ Augers



- Designed to fit between wall studs when used with common drills
- Eliminates the need for expensive right angle drills

Description	Shank Diameter	Cat. No.
5/8 x 4-3/4 in.	5/16 in.	35-862
3/4 - 4-3/4 in.	5/16 in.	35-864
7/8 x 4-3/4 in.	5/16 in.	35-866
1 x 4-3/4 in.	5/16 in.	35-868

## Installer Bits



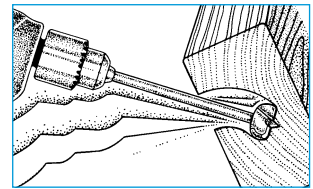
- Hole in fluted head for pulling wires through walls, ceiling and floors
- Flutes designed for quick chip removal – no clogging or binding
- Premium quality, extra-hard 52-100 carbon bearing steel

Description	Length (Inches)	Cat. No.
Installer Bit – 1/4 in.	18	35-870
Installer Bit – 3/8 in.	18	35-871
Installer Bit – 1/2 in.	18	35-872

## Wood Boring Bits



- Drills curved holes even in tight corners, eliminating sharp inside angles that hang wires
- Precision sharpened tip for fast and smooth boring
- Hex shank eliminates slippage
- Spur point centering
- Resharpenable



Description	RPM in Soft Wood	RPM in Hard Wood	Cat. No.
7/8 in. Wood Boring Bit	650-1000	600-850	90-193
1-1/8 in. Wood Boring Bit	650-1000	600-850	90-196

## Auger Bit Extensions



Auger Bit Extensions, 18 in. Six flats to fit drill chuck – Allen wrench included Description	Cat. No.
Auger Bit Extension – 5/16 in.	35-818
Auger Bit Extension – 7/16 in.	35-819



*Fits between wall studs!*



## Masonry bits for tough applications

IDEAL masonry drill bits are manufactured in the USA using state of the art technology. All are heat-treated and brazed in one of the most modern vacuum furnaces available, insuring consistent through-hardening of the steel. Our process demands the use of a premium high temperature, free flowing copper paste for brazing the tip, eliminating voids and producing the strongest bond available.

### SDS Rotary Percussion Bit



- Double fast-spiral fluting for superior dust removal, faster drill time and virtually no bind in the hole
- Heat-treating process ensures extra long life even when used on tough, extra hard and abrasive materials
- Shank for use with SDS and SDS plus rotary hammers

#### SDS Rotary Hammers

The Rotary Percussion Bit is designed for use with SDS rotary hammers. These hammers drill with successive strong impacts while rotating rapidly, bringing the tip into contact with new material as it cuts, and carrying it out along engineered spirals. The hardest of concretes and aggregates can be penetrated if an SDS rotary hammer of proper capacity is used with the appropriate Rotary Percussion Bit.

Description	Cat. No.
3/16 in. x 6-5/8 in. SDS Masonry Bit	<b>90-030</b>
1/4 in. x 6-5/8 in. SDS Masonry Bit	<b>90-031</b>
5/16 in. x 6-5/8 in. SDS Masonry Bit	<b>90-032</b>
3/8 in. x 6-5/8 in. SDS Masonry Bit	<b>90-033</b>
1/2 in. x 6-3/4 in. SDS Masonry Bit	<b>90-034</b>

### Rotary Hammer Bit



- Vacuum heat-treated carbide tipped masonry bit for rotary or hammer drilling
- Tip is made of the hardest carbide to retain a sharp cutting edge for drilling masonry materials

#### Rotary Drills

Use electric rotary drills, hand drills or bit braces for rotary-only drilling applications in softer materials that require no hammering action. Rotary drills should be used when drilling brittle materials, which could shatter under the impact of hammer tools.

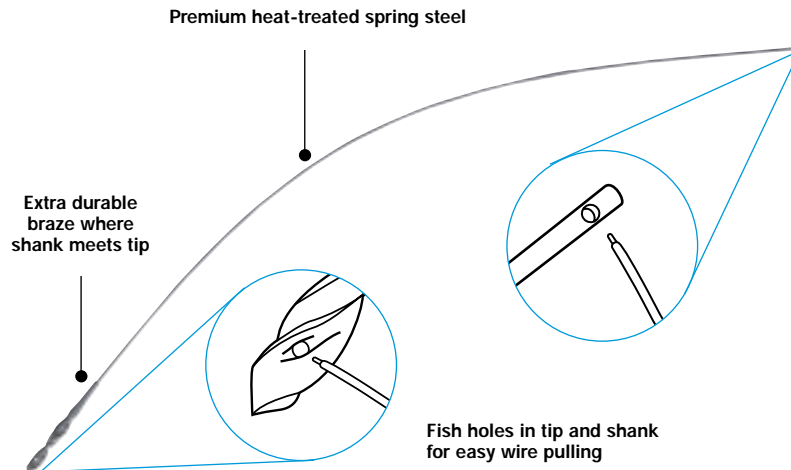
#### Hammer Drills

Use the Rotary Hammer Bit with electric hammer drills for drilling harder brick, limestone, marble materials or concrete with aggregates such as bluestone, granite, and quartz pebble. A hammer drill enhances the fast rotating action of the Rotary Hammer Bit with slight impact that helps to break up material being drilled.

Description	Shank	Cat. No.
3/16 in. x 4 in. Masonry Bit	1/4"	<b>90-003</b>
3/16 in. x 6 in. Masonry Bit	1/4"	<b>90-001</b>
1/4 in. x 4 in. Masonry Bit	1/4"	<b>90-004</b>
1/4 in. x 6 in. Masonry Bit	1/4"	<b>90-002</b>
5/16 in. x 4 in. Masonry Bit	1/4"	<b>90-005</b>
5/16 in. x 6 in. Masonry Bit	1/4"	<b>90-006</b>
3/8 in. x 4 in. Masonry Bit	1/4"	<b>90-008</b>
3/8 in. x 6 in. Masonry Bit	1/4"	<b>90-009</b>
1/2 in. x 6 in. Masonry Bit	3/8"	<b>90-011</b>

Application	Rotary Hammers	Rotary Drills	Hammer Drills
	Rotary Percussion Bit	Rotary Hammer Bit	Rotary Hammer Bit
Bluestone	X		X
Brick (common)	X	X	X
Brick (hard)	X		X
Cement Block	X	X	X
Cinder Block	X	X	X
Concrete (soft)	X	X	X
Concrete (hard)	X		X
Concrete (very hard)	X		
Fieldstone	X		
Flagstone		X	
Granite	X		
Limestone	X	X	X
Marble (soft & medium)	X	X	X
Marble (hard)	X		X
Plaster	X	X	X
Rock	X		X
Sandstone (soft)	X	X	X
Sandstone (hard)	X		X
Slate	X	X	X
Terra Cotta Block	X		X
Terrazzo	X	X	X
Tile, Glazed Vitreous	X		X
Tile, Non-vitrified		X	
Tile, Structural	X		X

## Flexible Drill Bits



Professional drill bits drill and fish wire in one easy step. Drill and pull wire through blind areas in ceilings, walls and floors. Shanks are made from premium heat-treated spring steel for maximum flexibility while practically eliminating any retained shank bend. A three-flat non-slip grip on the shank and fish holes in both the tip and shank insure trouble-free wire pulling in either direction. Our tip design provides superior tip/shank contact, increasing the strength and durability of the braze and preventing separation when striking nails or other obstructions. Multiple styles are available for a variety of applications.

### Screw Point Flexible Bit, Type B



- Fast and aggressive, self-starting bit
- Ultra-sharp ground threads provide increased pulling power through obstructions
- Designed for easy to tough wood drilling

Description	Shank	Cat. No.
3/8 in. x 24 in. Screw Point Flexible Bit	3/16	90-080
3/8 in. x 36 in. Screw Point Flexible Bit	3/16	90-081
3/8 in. x 54 in. Screw Point Flexible Bit	3/16	90-082
3/8 in. x 72 in. Screw Point Flexible Bit	3/16	90-083
1/2 in. x 36 in. Screw Point Flexible Bit	3/16	90-084
1/2 in. x 54 in. Screw Point Flexible Bit	3/16	90-085
1/2 in. x 72 in. Screw Point Flexible Bit	3/16	90-086
9/16 in. x 36 in. Screw Point Flexible Bit	3/16	90-087
9/16 in. x 54 in. Screw Point Flexible Bit	3/16	90-088
9/16 in. x 72 in. Screw Point Flexible Bit	3/16	90-089
3/4 in. x 36 in. Screw Point Flexible Bit	1/4	90-090
3/4 in. x 54 in. Screw Point Flexible Bit	1/4	90-091
3/4 in. x 72 in. Screw Point Flexible Bit	1/4	90-092

### Serrated Combination Flexible Bit, Type C

- Multi-purpose versatile bit for clean holes
- Designed for easy to medium wood drilling and light metal
- Pressure is needed for starting and pulling the bit through the wood



Description	Shank	Cat. No.
1/4 in. x 24 in. Serrated Combination Flexible Bit	3/16	90-061
1/4 in. x 54 in. Serrated Combination Flexible Bit	3/16	90-063
3/8 in. x 24 in. Serrated Combination Flexible Bit	3/16	90-065
3/8 in. x 36 in. Serrated Combination Flexible Bit	3/16	90-066
3/8 in. x 54 in. Serrated Combination Flexible Bit	3/16	90-067
3/8 in. x 72 in. Serrated Combination Flexible Bit	3/16	90-068
1/2 in. x 54 in. Serrated Combination Flexible Bit	3/16	90-070
9/16 in. x 54 in. Serrated Combination Flexible Bit	3/16	90-073

## High-Speed Steel Flexible Bit, Type HS

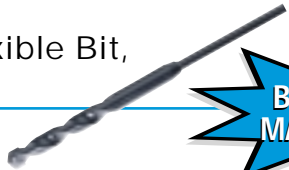


**Best for METAL**

- Heavy duty split point high-speed steel drill bit
- The best when encountering nail-embedded wood, steel studs and steel plates

Description	Shank	Cat. No.
3/8 in. x 24 in. High-speed Steel Flexible Bit	3/16	90-154
3/8 in. x 36 in. High-speed Steel Flexible Bit	3/16	90-155
3/8 in. x 54 in. High-speed Steel Flexible Bit	3/16	90-156
3/8 in. x 72 in. High-speed Steel Flexible Bit	3/16	90-157
1/2 in. x 24 in. High-speed Steel Flexible Bit	1/4	90-158
1/2 in. x 36 in. High-speed Steel Flexible Bit	1/4	90-159
1/2 in. x 54 in. High-speed Steel Flexible Bit	1/4	90-160
1/2 in. x 72 in. High-speed Steel Flexible Bit	1/4	90-161

## Masonry Flexible Bit, Type M

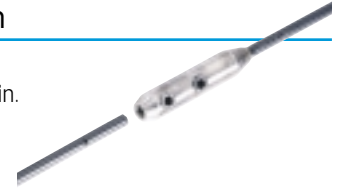


**Best for MASONRY**

- Masonry drill bit
- Designed for drilling in lightweight masonry materials

Description	Shank	Cat. No.
3/8 in. x 54 in. Masonry Flexible Bit	3/16	90-124
1/2 in. x 72 in. Masonry Flexible Bit	1/4	90-128

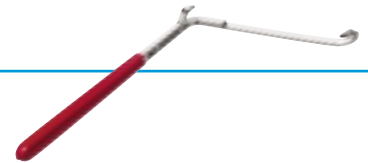
## Flexible Bit Extension



- Three lengths available for 3/16 in. and 1/4 in. shaft diameters
- Connect to chuck end of shaft to increase the length of the bit

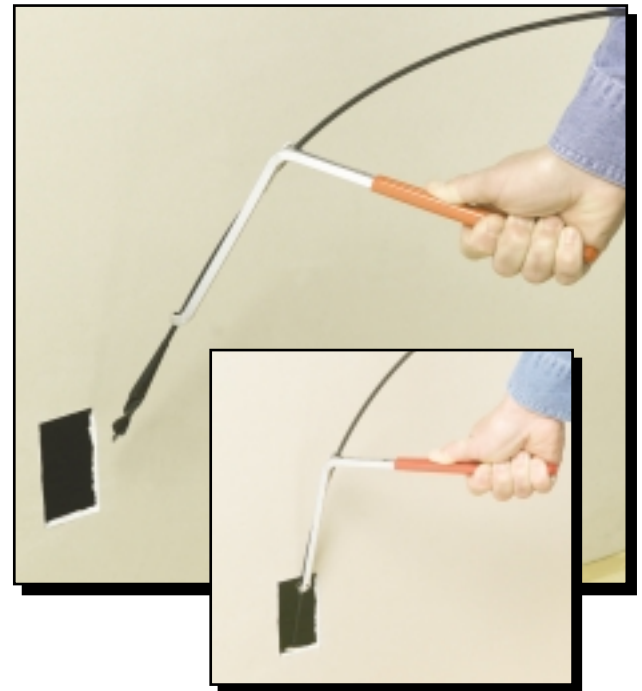
Description	Shank	Cat. No.
3/16 in. x 36 in. Flexible Bit Extension	3/16	90-170
3/16 in. x 54 in. Flexible Bit Extension	3/16	90-171
1/4 in. x 36 in. Flexible Bit Extension	1/4	90-173
1/4 in. x 54 in. Flexible Bit Extension	1/4	90-174

## Flexible Bit Placement Tool



- Use as a positioning guide for the flexible drill bits
- Aids in more accurate placement of bit tips within walls
- Increases directional control during drilling




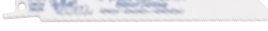
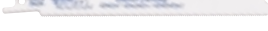
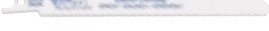


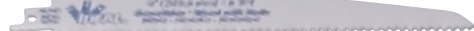








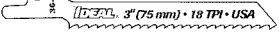
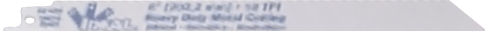


Description	Cat. No.
Flexible Bit Placement Tool	90-176



## Reciprocating Blades

- Bi-metal blades last up to 10 times longer than carbon steel blades
- Flexible spring-back provides long blade life
- Super-hard, high speed steel teeth for a sharp, long-lasting cutting edge
- Shatterproof for tough applications
- Fit all reciprocating saws using 1/2 inch universal shank





Reciprocating Blades

	L/W/TH (Inches)	TPI	Material	Blade Bock	Qty.	Application	Cat. No.
<b>Metal Cutting</b>							
	4 x 3/4 x .035	18	Bi-metal	Straight	5	Sheet metal and pipes with wall thickness from 1/8 to 3/16 in.	36-055
	6 x 3/4 x .035	18	Bi-metal	Straight	5	Sheet metal and pipes with wall thickness from 1/8 to 3/16 in.	36-057
	6 x 3/4 x .035	18	Bi-metal	Straight	25	Sheet metal and pipes with wall thickness from 1/8 in. to 3/16 in.	36-057B
	6 x 3/4 x .035	24	Bi-metal	Straight	5	Sheet metal and pipes with wall thickness up to 1/8 in.	36-058
	6 x 3/4 x .035	24	Bi-metal	Straight	25	Sheet metal and pipes with wall thickness up to 1/8 in.	36-058B
	6 x 3/4 x .035	14	Bi-metal	Straight	5	Heavy-gauge metals 1/8 in. and thicker; barstock angles	36-059
	6 x 3/4 x .035	14	Bi-metal	Straight	25	Heavy-gauge metals 1/8 in. and thicker; barstock angles.	36-059B
	6 x 3/4 x .035	18	Bi-metal	Straight	5	Sheet metal and pipes with wall thickness from 1/8 in. to 3/16 in.	36-060
<b>Heavy-Duty Metal Cutting</b>							
	6 x 3/4 x .050	18	Bi-metal	Straight	2	Heavy-duty blade for cutting pipe, structural and stainless steel from 1/8 to 3/16 in. thick.	36-085
	8 x 3/4 x .050	10/14	Bi-metal	Straight	2	Heavy-duty blade for cutting pipe, structural and stainless steel from 1/8 to 1/2 in. thick.	36-086
	12 x 3/4 x .050	10/14	Bi-metal	Taper	5	Heavy-duty blade for cutting pipe, structural and stainless steel from 1/8 to 1/2 in. thick.	36-087
<b>Wood w/Nails</b>							
	6 x 3/4 x .050	6	Bi-metal	Taper	5	Roughing, fast work, nail-embedded knotty wood. Remodeling.	36-065
	6 x 3/4 x .050	6	Bi-metal	Taper	25	Roughing, fast work, nail-embedded knotty wood. Remodeling.	36-065B
	9 x 3/4 x .050	6	Bi-metal	Taper	5	Roughing, fast work, nail-embedded knotty wood. Remodeling.	36-066
	12 x 3/4 x .050	6	Bi-metal	Taper	5	Roughing, fast work, nail-embedded knotty wood. Remodeling.	36-067
<b>General Purpose</b>							
	6 x 3/4 x .035	10	Bi-metal	Straight	5	Wood w/nails, metal and non-ferrous metal and pipes with wall thickness over 3/8 in.	36-075
<b>Specialty Cutting</b>							
	8 x 3/4 x .050	Grit	Tung. Grit	Straight	2	Iron pipe, fiberglass, reinforced plastics, ceramic tile, stone, slate and brick.	36-090
	3 x 5/16 x .035	18	Bi-Metal	Scroll	5	Scroll cutting wood, cast aluminum and non-ferrous metals	36-090
<b>Demolition</b>							
	9 x 7/8 x .062	6	Bi-metal	Taper	2	Wood and nail demolition. Plunge cutting ability. Remodeling.	36-095
	9 x 7/8 x .062	10	Bi-metal	Taper	2	Metal and pipe demolition. Fire and rescue work.	36-096
<b>Plaster/Drywall</b>							
	6 x 3/4 x .050	6	Bi-metal	Taper	2	Plaster and drywall.	36-088

## Long-Life Metal Cutting Reciprocating Blades



- Painstakingly engineered to be the longest lasting metal cutting blades available
- Long-life blades perform up to three times as many cuts as similar metal cutting blades
- 8% cobalt cutting edge for extreme durability
- Shatterproof bi-metal design
- Longer life for greater value

Long-Life Blades	L/W/TH (Inches)	TPI	Material	Blade Bock	Qty.	Application	Cat. No.
	6 x 3/4 x .035	18	Bi-metal	Straight	5	Long-Life blade for cutting sheet metal and pipes with wall thickness from 1/8 to 3/16 in.	<b>36-043</b>
	8 x 3/4 x .035	18	Bi-metal	Straight	5	Long-Life blade for cutting sheet metal and pipes with wall thickness from 1/8 to 3/16 in.	<b>36-044</b>
	6 x 1 x .042	14	Bi-metal	Straight	5	Long-Life blade for cutting heavy gauge metals 1/8 in. and thicker; barstock and angles	<b>36-046</b>
	12 x 1 x .050	14	Bi-metal	Straight	5	Long-Life blade for cutting heavy gauge metals 1/8 in. and thicker; barstock and angles	<b>36-048</b>

## Portable Band Saw Blades



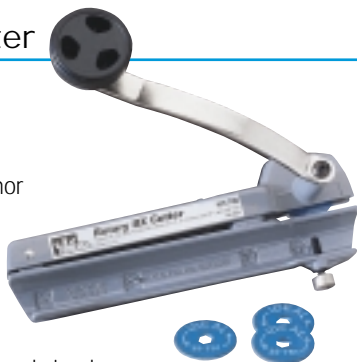
- Bi-metal construction
- Fit all standard portable band saw machines
- For pipe, tubing and solids
- Cut any machinable metal, including conduit, angle iron, structurals, rebar and stainless steel tubing

L/W/THK (Inches)	TPI	Qty./Pack	Cat. No.
44-7/8 x 1/2 x .020	10	3	<b>36-070</b>
44-7/8 x 1/2 x .020	14	3	<b>36-071</b>
44-7/8 x 1/2 x .020	18	3	<b>36-072</b>
44-7/8 x 1/2 x .020	24	3	<b>36-073</b>



## Rotary BX/MC Cutter

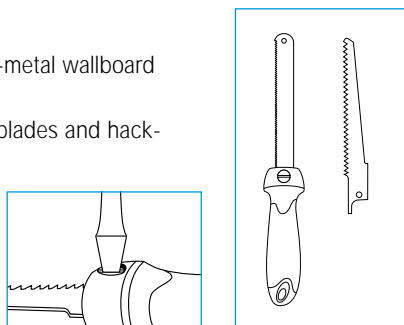
- Handles all common BX, MC and Flex cables
- Blue sapphire blade cuts armor without damage to internal conductors
- Splices cleanly through casings with only a few turns
- Thumbscrew holds cable securely in place
- Epoxy-coated to resist corrosion
- Handle knob stores up to six replacement blades



Description	Cat. No.
Rotary BX/MC Cutter	35-780
Replacement blades (5 per pack)	35-781

## Jab Saw

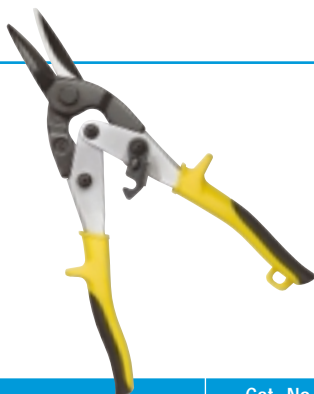
- Includes replaceable bi-metal wallboard blade
- Holds all reciprocating blades and hacksaw blades
- Ergonomic grip



Description	Cat. No.
Jab Saw	35-275
Replacement blade	36-088

## Aviation Tin Snips

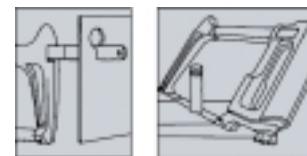
- Chrome-molybdenum steel forged blades for greater strength and durability
- Serrated edges provide a stable hold when cutting
- Labor-saving design for easier cutting
- Comfortable non-slip dual durometer grips



Description	Cat. No.
Straight Cut Aviation Tin Snips	35-001
Right Cut Aviation Tin Snips	35-002
Left Cut Aviation Tin Snips	35-003

## Heavy-Duty Hacksaw

- Use as conventional hacksaw or as jab saw to enlarge holes
- Rugged frame provides lightweight rigidity and exceptional control
- Stores up to nine extra blades
- Blades can be adjusted to 55° angle for flush cutting and tensioned to 25,000 psi
- Includes 12 in. x 24T bi-metal blade



Description	Cat. No.
Heavy Duty Hacksaw	35-260

## Ergonomic Hacksaw

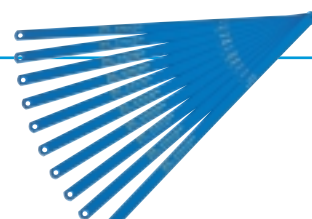
- Angled handle for easier cutting
- Blade can easily be adjusted for flush cutting
- Easy tensioning wing-nut keeps blades tight for straighter cuts
- Cushioned ergonomic grip for performance and comfort
- Includes 12 in. x 24T bi-metal blade



Description	Cat. No.
Ergonomic Hacksaw	35-261

## Hacksaw Blades

- Bi-metal blades provide strength, flexibility and longer life



Description	Qty./Pack	Cat. No.
12 in. x 18T Blades	10	35-271
12 in. x 24T Blades	10	35-272
12 in. x 32T Blades	10	35-273
12 in. x 18T Blades	100	35-262
12 in. x 24T Blades	100	35-263
12 in. x 32T Blades	100	35-264

# Designed with the electrician's needs in mind



## **Premium Leather Line**

Top of the line tool carriers are handcrafted from heavy, top-grain cowhide and slow tanned in natural oils to enhance the leather's inherent strength. Each bag is hand waxed for lasting protection against stains and moisture and is warranted for life. Natural or black leather – your choice.

## **Standard Leather Line**

Leather that stands up to the job like no other material, these tool carriers are constructed of top-grain, natural cowhide and tanned for added strength and durability. Watch their color age to a deep tan over the years.



## **Fabric Line**

Durable, lightweight, portable tool totes in rugged nylon polyester or heavyweight canvas provide the perfect tool storage. Convenient pockets mean easy access; inner compartments keep your tools organized and safe when not in use.

## **Tool Kits**

Tool kits designed to meet the needs of the professional electrician, from apprentice to master electrician. Kit selections have been established with the guidance from leading electrical trainers and seasoned master electricians. Whether you're just starting out or are a seasoned professional, IDEAL Tool Kits provide the perfect carrier and tools to do the job.



## Tuff-Tote™ Ultimate Tool Carriers



- Eight-inch square tool carrier features two divided inside compartments with six screwdriver loops each, one large center compartment, four outside pockets and eight outside tool loops
- Exclusive leather-wrapped grab handle for carrying comfort
- Removable shoulder strap helps relieve lower back strain
- Unique stand-alone design keeps tools standing upright for easy identification and access
- Rust-resistant, plated-steel hardware and heavy, lock-stitched nylon thread for long-term durability
- Oil and moisture-resistant reinforced bottom

Description	Cat. No.
Premium Leather Carrier w/shoulder strap	35-975
Premium Black Leather Carrier w/shoulder strap	35-975BLK
Standard Leather Carrier w/shoulder strap	35-325

## Electrician's Tool Pouch

- Seven-pocket tool pouch
- Full length belt tunnel
- Chain tape lanyard



Description	Cat. No.
Electrician's Tool Pouch	10-466

## Tuff-Tote™ Tool Carriers



- Convenient 6 in. x 8 in. tool carrier with four center screwdriver slots, two interior compartments, two divided outside pockets and four outside tool loops
- Exclusive leather grab handle for carrying comfort
- Removable shoulder strap helps relieve lower back strain
- Unique stand-alone design keeps tools standing upright for easy identification and access
- Rust-resistant, plated-steel hardware and heavy, lock-stitched nylon thread for long-term durability
- Oil and moisture-resistant reinforced bottom

Description	Cat. No.
Premium Leather Carrier w/shoulder strap	35-969
Premium Black Leather Carrier w/shoulder strap	35-969BLK
Standard Leather Carrier w/shoulder strap	35-324

## Tuff-Tote™ Tool Pouches



- Eight-pocket, belt-mounted pouch features large utility compartment with two dividers and six screwdriver loops, seven outside pockets, release snaps and tape chain
- Exclusive leather grab handle for carrying comfort
- Removable shoulder strap helps relieve lower back strain
- Rust-resistant, plated-steel hardware and heavy, lock-stitched nylon thread for long-term durability
- Tunnel belt loop accommodates belts up to 2-1/4 in. wide

Description	Cat. No.
Premium Leather Pouch w/shoulder strap	35-950
Premium Black Leather Pouch w/shoulder strap	35-950BLK
Standard Leather Pouch w/shoulder strap	35-311

Note: Tools sold separately

## Tuff-Tote™ Shoulder Bag



- Compact tool organizer with closing flap for added security and protection
- Features three inside compartments with six screwdriver loops, small closed outside pocket for small tools or connectors and flat back pocket for papers or slim tools
- Exclusive leather-wrapped grab handle for carrying comfort
- Detachable shoulder strap helps relieve lower back strain
- Rust-resistant, plated-steel hardware and heavy, lock-stitched nylon thread for long-term durability

Description	Cat. No.
Premium Leather Shoulder Bag w/shoulder strap	35-980
Premium Black Leather Shoulder Bag w/shoulder strap	35-980BLK

## Tuff-Tote™ Cell Phone Pouches



- Fits most phones
- Closing flap for added security and protection
- Convenient belt strap

Description	Cat. No.
Premium Leather Pouch w/belt strap	35-958
Premium Black Leather Pouch w/belt strap	35-958BLK

## Tuff-Tote™ Tester Pouches



- Fits most hand-held testers
- Easy-access top
- Convenient belt strap

Description	Cat. No.
Premium Leather Pouch w/belt strap	35-956
Premium Black Leather Pouch w/belt strap	35-956BLK
Standard Leather Pouch w/belt strap	35-339

## Shoulder Straps



- Nickel-plated hardware for long-term durability and corrosion resistance
- 2-in. wide shoulder pad for added comfort

Description	Cat. No.
Premium Leather Strap	35-965
Premium Black Leather Strap	35-965BLK
Standard Leather Strap	35-338

## Belts



- Nickel-plated hardware for long-term durability and corrosion resistance

Description	Cat. No.
Premium Leather Belt – 2 in. x 48 in.	35-995
Premium Black Leather Belt – 2 in. x 48 in.	35-995BLK
Premium Leather Belt w/Clasp Buckle – 2 in. x 48 in.	35-903
Standard Leather Belt – 1-3/4 in. x 46 in.	35-316
Web Belt	10-398

## Hammer Holder

- Heavy-duty leather construction
- Riveted steel hammer loop
- Fits on all sizes of tool belts



Description	Cat. No.
Hammer Holder	10-399



## Pocket Pal™ Tool Holsters

- Protects pocket from sharp tools
- Doubles tool carrying capacity
- Can be worn in pocket or on belt



Description	Cat. No.
Pocket Pal™ Tool Holster	35-505
Pocket Pal™ Tool Holster - CAMO	35-505CAM

## Belt Bag™ Supplies Pouches

- Holds wire connectors, staples, and other supplies ready for use on the job
- Easy access opening closes automatically to keep supplies safely retained until needed



Description	Cat. No.
Belt Bag™ Supplies Pouch	35-405
Belt Bag™ Supplies Pouch - CAMO	35-405CAM

## Mechanic's Tool Bag

- Eight narrow inside pockets designed to hold small tools
- Two side pockets with closeable snaps for large tools or loose items
- Double inside liner and rigid bottom prevent bag distortion
- Durable nylon polyester construction



Description	Cat. No.
Mechanic's Tool Bag	35-535

## Divider Pouch™ Small Parts Bag

- Designed to provide perfect small parts storage — keeps parts separate and organized
- Six internally divided 5-in. deep pockets
- Convenient drawstring protects contents from spillage
- Convenient handle loop
- Sized to stack in 5-gallon buckets
- Durable nylon polyester construction



Description	Cat. No.
Divider Pouch™ – blue	35-655

## Bucket Bag Tool Carriers

- 11-1/2 in. deep bag fits over the rim of a standard 5-gallon bucket
- Forty-three convenient pockets — 36 pleated outside and inside pockets
- Rugged nylon polyester construction



Description	Cat. No.
Bucket Bag Tool Carrier – Blue	35-665
Bucket Bag Tool Carrier – CAMO	35-665CAM

## Tool Porter™ Tool Bags

- Soft-sided, large-capacity bag (10 in. deep x 17 in. long x 6-1/4 in. wide) provides ample storage
- Rugged zipper closure helps prevent tool loss
- Nineteen outside pockets offer easy access to commonly used tools and supplies
- Reinforced bottom increases durability and carrying ease
- Detachable shoulder strap rated at 40 lbs.



Description	Cat. No.
Tool Porter™ Tool Bag – 18 oz. canvas	35-415
Tool Porter™ Tool Bag – nylon polyester	35-417

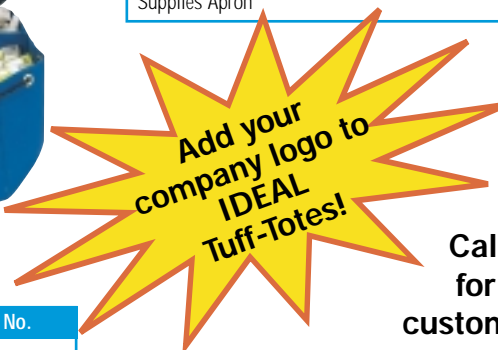
Note: Tools sold separately

## Supplies Apron

- Two pockets for connectors and fasteners, each 8 in. x 15 in.
- Natural duck construction



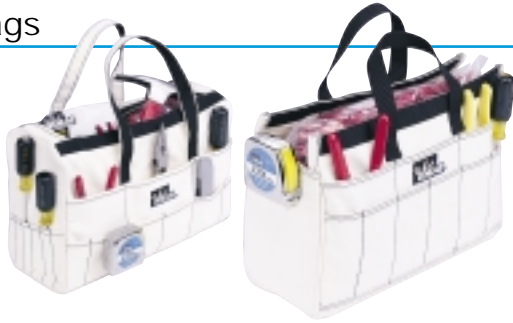
Description	Cat. No.
Supplies Apron	35-474



**Call 800-435-0705 for information on custom imprinted orders.**



## Tool Carrier™/Electrician's Carrier™ Tool Bags



- Stitched outer pockets provide convenient storage and quick access for frequently used tools
- Heavy-duty, 18 oz. canvas construction
- Velcro® closure protects contents from loss

Description	Cat. No.
Tool Carrier™ Tool Bag – 7-1/2 in. D x 17 in. L x 6-1/4 in. W	35-533
Electrician's Carrier™ Tool Bag – 10 in. D x 17 in. L x 6-1/4 in. W	35-534

Note: Tools sold separately

## Large Mouth Bags

- Top opens completely for easy access to large tools – reinforced to hold itself open
- Measures 9 in. wide x 12 in. deep with outside and inside pockets for convenient hand tool storage
- Rugged zipper closure helps prevent tool loss
- Removable shoulder strap
- Durable multi-ply construction



Description	Cat. No.
Large Mouth Bag – 13 in. long – Blue	35-410
Large Mouth Bag – 16 in. long – Blue	35-418
Large Mouth Bag – 16 in. long – CAMO	35-418CAM
Large Mouth Bag – 18 in. long – Blue	35-427
Large Mouth Bag – 18 in. long – CAMO	35-427CAM
Large Mouth Bag – 20 in. long – Blue	35-431
Large Mouth Bag – 20 in. long – CAMO	35-431CAM
Large Mouth Bag – 24 in. long – Blue	35-463
Large Mouth Bag – 24 in. long – CAMO	35-463CAM

Note: Tools sold separately

## Canvas Tool Bag

- Extra large 16 in. x 16 in. tool bag
- Reinforced steel framework
- Genuine leather handles and straps
- Heavy-weight canvas sides with interior pocket



Description	Cat. No.
Canvas Tool Bag	35-302

## Journeyman Electrician's Tote™

- Compact and versatile design
- Carry as a hand-tote, shoulder-tote, or tool-belt
- Includes removable shoulder strap and belt
- Durable multi-ply construction



Description	Cat. No.
Journeyman Electrician's Tote™	35-462

## Master Electrician's Tote™

- Spacious and durable design
- Organizes and displays tools for fast access
- Includes removable shoulder strap
- Durable multi-ply construction



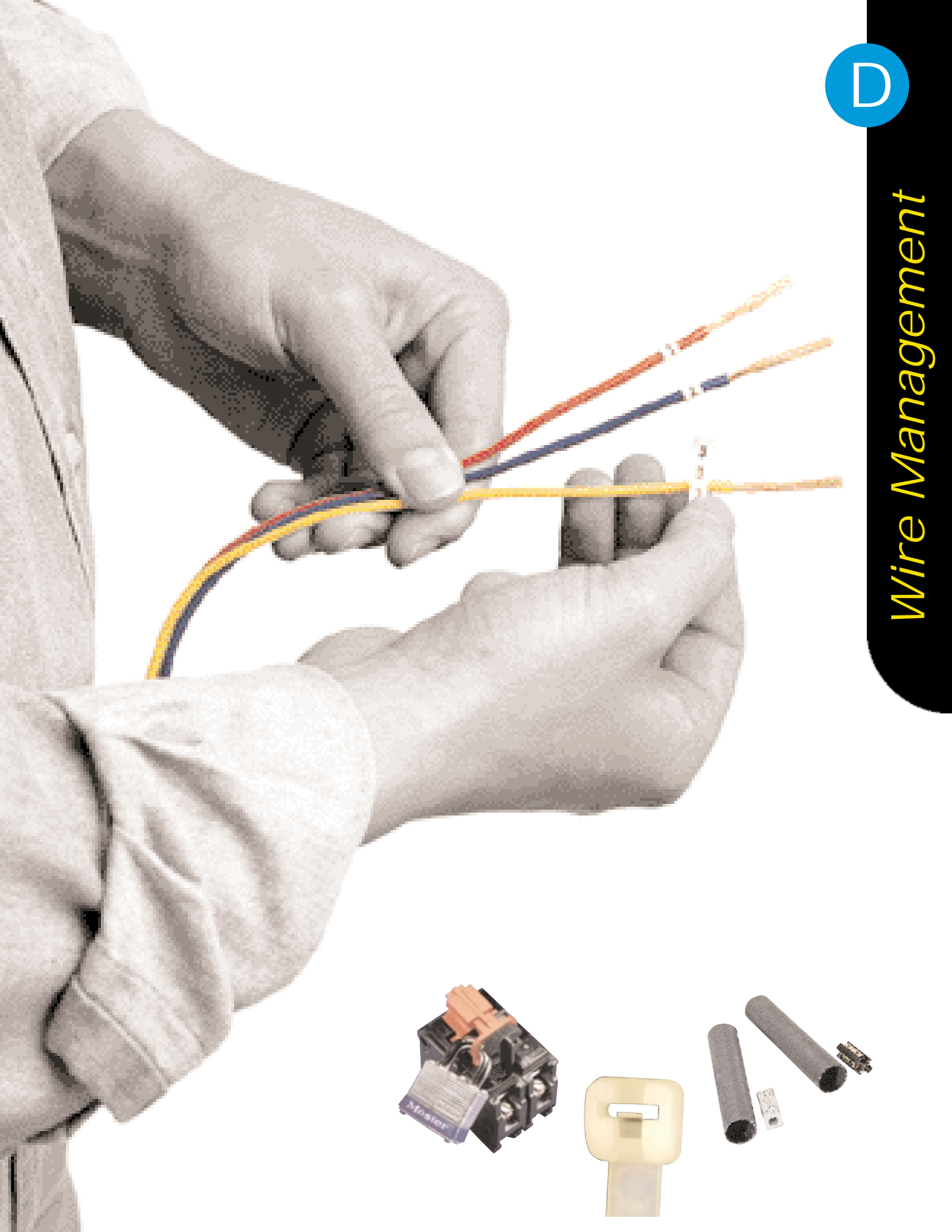
Description	Cat. No.
Master Electrician's Tote™ – Blue	35-441

## Zipper Pouches

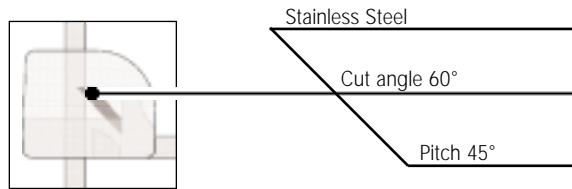
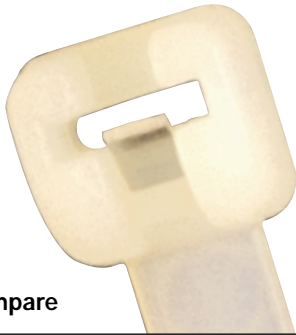
- Durable, water resistant material
- Heavy duty, self-repairing zippers



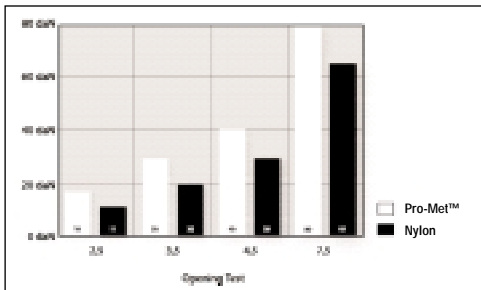
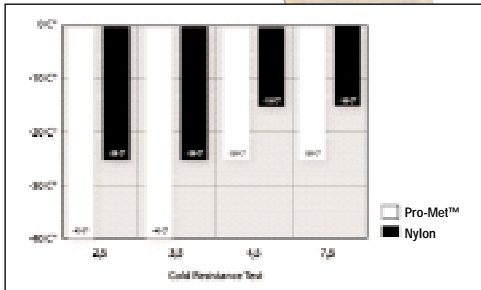
Description	Cat. No.
Zipper Pouch 10-1/2 in. long – Blue	35-402
Zipper Pouch 12-1/2 in. long – Blue	35-403
Zipper Pouch 12-1/2 in. long – CAMO	35-403CAM



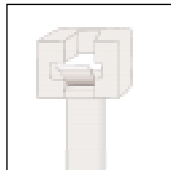
# Pro-Met™



## Dare to compare

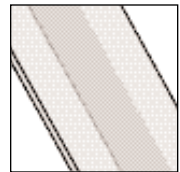


- Larger stainless steel barb for more resistance
- Metal tooth is cut and set firmly in place using exclusive manufacturing processes



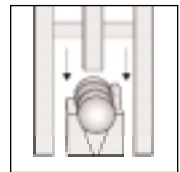
## Central Rib Replaces Teeth

- Central rib design allows for maximum flexibility without losing resistance
- Central relief eliminates breaking points
- Infinitely adjustable to any bundle diameter



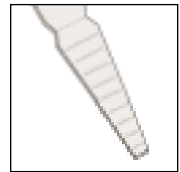
## Superior Strength

- Excellent impact resistance



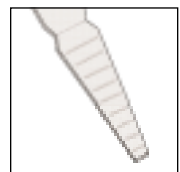
## Unique Tail Design

- Straight tail gives you more tightening diameter
- Spear point simplifies installation
- Ribbing on the point allows for grabbing and tightening



## Ergonomic Head

- Head design allows for quicker installation
- Smooth head protects installer hands
- Decrease your application costs



## Miniature (18 lb.) Natural and UV Black

Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Qty./Bag	Cat. No.
Natural Nylon	3.9 in./100mm	0.10 in./2.5mm	0.035 in./0.9mm	0.9 in./24mm	18 lbs./18 DaN	100	IMET1M-C
Natural Nylon						1000	IMET1M-M
UV Black Nylon						100	IMET1M-CO
UV Black Nylon						1000	IMET1M-MO
Natural Nylon	7.9 in./200mm	0.10 in./2.5mm	0.035 in./0.9mm	2.2 in./55mm	18 lbs./18 DaN	100	IMET2M-C
Natural Nylon						1000	IMET2M-M
UV Black Nylon						100	IMET2M-CO
UV Black Nylon						1000	IMET2M-MO



## Intermediate (40 lb.) Ties Natural and UV Black

Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Qty./Bag	Cat. No.
Natural Nylon	5.5 in./140mm	0.14 in./3.5mm	0.039 in./1.0mm	1.4 in./36mm	40 lbs./28 DaN	100	IMET1_5I-C
Natural Nylon						1000	IMET1_5I-M
UV Black Nylon						100	IMET1_5I-CO
UV Black Nylon						1000	IMET1_5I-MO
Natural Nylon	7.9 in./200mm	0.14 in./3.5mm	0.039 in./1.0mm	2.2 in./55mm	40 lbs./28 DaN	100	IMET2I-C
Natural Nylon						1000	IMET2I-M
UV Black Nylon						100	IMET2I-CO
UV Black Nylon						1000	IMET2I-MO
Natural Nylon	11 in./280mm	0.14 in./3.5mm	0.039 in./1.0mm	3.1 in./80mm	40 lbs./28 DaN	100	IMET3I-C
Natural Nylon						1000	IMET3I-M
UV Black Nylon						100	IMET3I-CO
UV Black Nylon						1000	IMET3I-MO



## Standard (50 lb.) Ties Natural and UV Black

Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Qty./Bag	Cat. No.
Natural Nylon	7.9 in./200mm	0.18 in./4.5mm	0.043 in./1.1mm	2.0 in./51mm	50 lbs./40 DaN	100	IMET2S-C
Natural Nylon						1000	IMET2S-M
UV Black Nylon						100	IMET2S-CO
UV Black Nylon						1000	IMET2S-MO
Natural Nylon	11.4 in./290mm	0.18 in./4.5mm	0.043 in./1.1mm	3.0 in./76mm	50 lbs./40 DaN	100	IMET3S-C
Natural Nylon						1000	IMET3S-M
UV Black Nylon						100	IMET3S-CO
UV Black Nylon						1000	IMET3S-MO
Natural Nylon	14.2 in./360mm	0.18 in./4.5mm	0.043 in./1.1mm	4.0 in./101mm	50 lbs./40 DaN	100	IMET4S-C
Natural Nylon						1000	IMET4S-M
UV Black Nylon						100	IMET4S-CO
UV Black Nylon						1000	IMET4S-MO

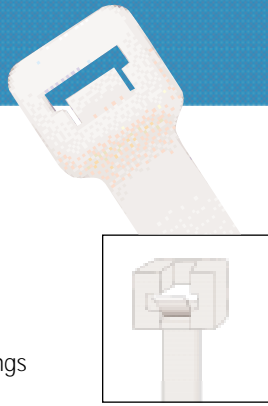


## Heavy-Duty (120 lb.) Ties Natural and UV Black

Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Qty./Bag	Cat. No.
Natural Nylon	8.7 in./220mm	0.30 in./7.5mm	0.059 in./1.5mm	2.2 in./56mm	120 lbs./80 DaN	50	IMET2LH-L
Natural Nylon						500	IMET2LH-D
UV Black Nylon						50	IMET2LH-LO
UV Black Nylon						500	IMET2LH-DO
Natural Nylon	14.2 in./360mm	0.30 in./7.5mm	0.059 in./1.5mm	4.0 in./101mm	120 lbs./80 DaN	50	IMET4LH-L
Natural Nylon						500	IMET4LH-D
UV Black Nylon						50	IMET4LH-LO
UV Black Nylon						500	IMET4LH-DO

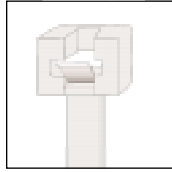


Cable Ties



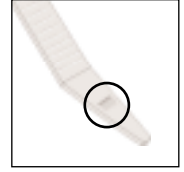
### Quality Construction

- One-piece design for added strength
- Superior locking mechanism
- Exceeds industry tensile strength ratings



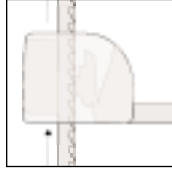
### Tab Stop

- Stay-Tab feature allows tie to be partially closed without engaging the pawl (locking mechanism)
- Allows adjustment of bundle before tightening



### Low Insertion Force

- Tapered thin tip reduces initial friction
- Lowest insertion force with the highest tensile strength
- Reduces installation fatigue



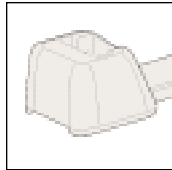
### Stepped Tail Gripper

- Tapered tail grip assures positive threading
- Stepped tail allows for easier grabbing and tightening once engaged



### No Burrs or Sharp Edges

- Smooth corners provide added safety
- Rounded edges eliminate insulation damage



### Angled Tail

- Eases initial insertion alignment
- Lowers installation costs



## Miniature (18 lb.) Natural & UV Black

Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Mil-Spec Reference	Qty./Bag	Cat. No.
Natural Nylon	4.0 in./102mm	.094 in./2.39mm	.042 in./1.06mm	1/16 - 7/8	18 lbs.	MS3367-4-9	100	IT1M-C
Natural Nylon							1000	IT1M-M
UV Black Nylon						100	IT1M-CO	
UV Black Nylon								1000
Natural Nylon	8.1 in./206mm	.094 in./2.39mm	.042 in./1.06mm	1/16 - 2-3/16	18 lbs.		100	IT2M-C
Natural Nylon							1000	IT2M-M
UV Black Nylon							100	IT2M-CO
UV Black Nylon							1000	IT2M-MO



## Intermediate (40 lb.) Natural & UV Black

Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Mil-Spec Reference	Qty./Bag	Cat. No.
Natural Nylon	5.7 in./145mm	.140 in./3.56mm	.049 in./1.24mm	1/16 - 1-7/16	40 lbs.	MS3367-5-9	100	IT1_5I-C
Natural Nylon							1000	IT1_5I-M
UV Black Nylon						100	IT1_5I-CO	
UV Black Nylon								1000
Natural Nylon	11.5 in./292mm	.142 in./3.60mm	.055 in./1.40mm	1/16-3-3/8	40 lbs.		100	IT3I-C
UV Black Nylon							100	IT3I-CO

\*1\_5 Series





# Wire Management

## Standard (50 lb.) Natural, UV Black & Heat Stabilized Black

Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Mil-Spec Reference	Qty./Bag	Cat. No.
Natural Nylon	7.5 in./190mm	.178 in./4.52mm	.053 in./1.34mm	1/16 - 1-7/8	50 lbs.	MS3367-1-9	100	IT2S-C
Natural Nylon							1000	IT2S-M
UV Black Nylon						MS3367-1-0	100	IT2S-CO
UV Black Nylon							1000	IT2S-MO
Heat Stabilized Black Nylon						100	IT2S-C30	
Natural Nylon	11.2 in./284mm	.178 in./4.52mm	.053 in./1.34mm	1/16 - 3-1/16	50 lbs.	MS3367-7-9	100	IT3S-C
Natural Nylon							500	IT3S-D
UV Black Nylon						MS3367-7-0	100	IT3S-CO
UV Black Nylon							500	IT3S-DO
Heat Stabilized Black Nylon						100	IT3S-C30	
Natural Nylon	14.5 in./368mm	.178 in./4.52mm	.053 in./1.34mm	1/16 - 4-1/8	50 lbs.	MS3367-2-9	100	IT4S-C
Natural Nylon							500	IT4S-D
UV Black Nylon						MS3367-2-0	100	IT4S-CO
UV Black Nylon							500	IT4S-DO
Heat Stabilized Black Nylon						100	IT4S-C30	
Natural Nylon	17.0 in./432mm	.190 in./4.82mm	.053 in./1.34mm	1/16 - 4-3/4	50 lbs.		100	IT5S-C
UV Black Nylon						100	IT5S-CO	

\*2S, 3S & 4S Series



Cable Ties

## Light Heavy-Duty, Heavy-Duty & Extra Heavy-Duty Natural, UV Black & Heat Stabilized Black

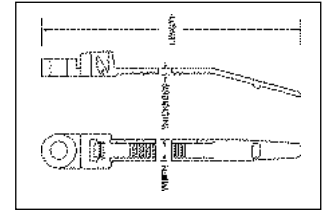
Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Mil-Spec Reference	Qty./Bag	Cat. No.
Natural Nylon	15.1 in./384mm	.300 in./7.62mm	.075 in./1.90mm	3/16-4-1/16	120 lbs.	MS3367-3-9	50	IT4LH-L
UV Black Nylon						MS3367-3-0	50	IT4LH-LO
Natural Nylon	17.8 in./451mm	.300 in./7.62mm	.075 in./1.90mm	3/16-5-1/4	120 lbs.		50	IT5LH-L
UV Black Nylon							50	IT5LH-LO
Natural Nylon	24.2 in./614mm	.300 in./7.62mm	.075 in./1.90mm	3/16-7	120 lbs.		50	IT7LH-L
UV Black Nylon							50	IT7LH-LO
Natural Nylon	28.0 in./711mm	.300 in./7.62mm	.075 in./1.90mm	3/16-8	120 lbs.		50	IT8LH-L
UV Black Nylon							50	IT8LH-LO
Natural Nylon	25.3 in./642mm	.340 in./8.64mm	.090 in./2.29mm	3/16-7-3/16	175 lbs.	MS3367-10-9	50	IT7H-L
UV Black Nylon						MS3367-10-0	50	IT7H-LO
Natural Nylon	33.1 in./841mm	.340 in./8.64mm	.090 in./2.29mm	3/16-9-3/4	175 lbs.	MS3367-12-9	50	IT10H-L
UV Black Nylon						MS3367-12-0	50	IT10H-LO
Natural Nylon	37.1 in./942mm	.340 in./8.64mm	.090 in./2.29mm	3/16-11	175 lbs.	MS3367-13-9	50	IT11H-L
UV Black Nylon						MS3367-13-0	50	IT11H-LO
Natural Nylon	47.8 in./1214mm	.340 in./8.64mm	.090 in./2.29mm	3/8-14-1/2	175 lbs.	MS3367-16-9	50	IT14H-L
Gray Nylon						MS3367-16-8	50	IT14H-L8
UV Black Nylon						MS3367-16-0	50	IT14H-LO
Natural Nylon	22.8 in./579mm	.50 in./12.7mm	.080 in./2.03mm	3/16-6	250 lbs.		100	IT6EH-C
UV Black Nylon							100	IT6EH-CO

\*4LH, 7H, 10H, 11H, 14H Series



## Mounting Head Ties Natural and UV Black

- Use for attaching bundles to surfaces
- Allows bundling before and after mounting



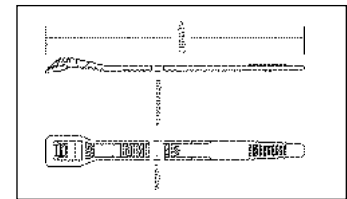
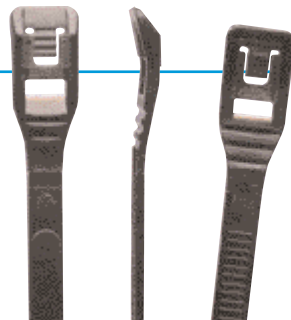
Description	Length	Width	Strap Thickness	Max Bundle	Tensile Strength	Screw Size	Qty./Bag	Cat. No.
Natural Nylon	6.0 in./152mm	.140 in./3.55mm	.048 in./1.21mm	1/16 - 1-1/4 in.	30 lbs.	No. 8	100	IT1_5IMH-C
UV Black Nylon							100	IT1_5IMH-CO
Natural Nylon	8.1 in./206mm	.178 in./4.52mm	.053 in./1.35mm	1/16 - 1-3/4 in.	50 lbs.	No. 10	100	IT2SMH-C
Natural Nylon							1000	IT2SMH-M
UV Black Nylon							100	IT2SMH-CO
UV Black Nylon							1000	IT2SMH-MO
Natural Nylon	11.8 in./300mm	.189 in./4.80mm	.050 in./1.27mm	1/16 - 3 in.	50 lbs.	No. 10	100	IT3SMH-C
UV Black Nylon							100	IT3SMH-CO
Natural Nylon	14.5 in./370mm	.189 in./4.80mm	.060 in./1.52mm	1/16 - 4 in.	50 lbs.	No. 10	100	IT4SMH-C
UV Black Nylon							100	IT4SMH-CO
Natural Nylon	15.7 in./398mm	.300 in./7.62mm	.075 in./1.90mm	3/16 - 4-1/16 in.	120 lbs.	1/4"	100	IT4LHMH-C
UV Black Nylon							100	IT4LHMH-CO

\*2S, 4LH Series



## In-Line Ties Natural and UV Black

- In-line design provides a low profile to reduce required clearance
- Eliminates sharp edges to protect adjacent cables along with arms and hands



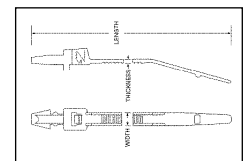
Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Mil-Spec Reference	Qty./Bag	Cat. No.
Natural Nylon	7.5 in./191mm	.178 in./4.52mm	.053 in./1.35mm	3/8 - 1-3/4 in.	50 lbs.	MS3367-23-9	100	IT2SIL-C
UV Black Nylon						MS3367-23-0	100	IT2SIL-CO
Natural Nylon	15.1 in./384mm	.300 in./7.62mm	.075 in./1.90mm	9/16 - 3-1/2 in.	120 lbs.	MS3367-25-9	100	IT4LHIL-C
UV Black Nylon						MS3367-25-0	100	IT4LHIL-CO

\*2S Series



## Push Mount Ties Natural and UV Black

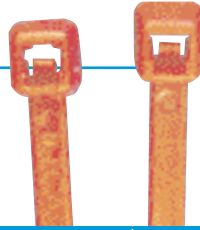
- For mounting in pre-drilled panel holes
- Use with panels 1/4 in./3.6mm thick



Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Qty./Bag	Cat. No.
Natural Nylon	8.0 in./203mm	.190 in./7.83mm	.055 in./1.40mm	1-7/8 in.	50 lbs.	100	IT2SPM-C
UV Black Nylon						100	IT2SPM-CO

## Plenum Rated-Halar® Ties

- For use in air handling spaces
- Easily recognized maroon color
- Low smoke density and excellent flammability rating



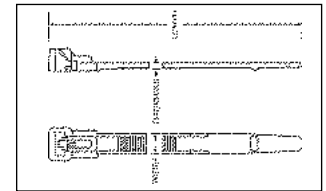
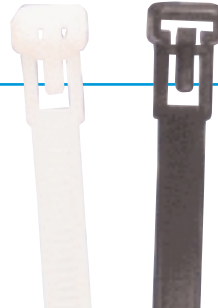
Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Qty./Bag	Cat. No.
Maroon Halar	4.0 in./102mm	.094 in./2.4mm	.042 in./1.07mm	1/16 - 7/8 in.	18 lbs.	100	IT1M-C702
Maroon Halar	8.0 in./203mm	.178 in./4.5mm	.053 in./1.35mm	1/16 - 2 in.	50 lb.s	100	IT2S-C702

Approximate dimensions.

Halar® is a trademark of Ausimont Chemical Co.

## Releasable Ties Natural and UV Black

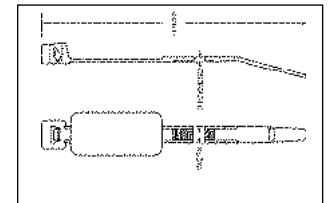
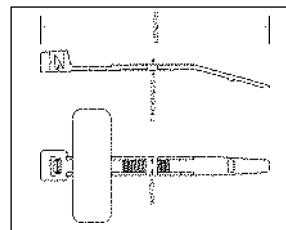
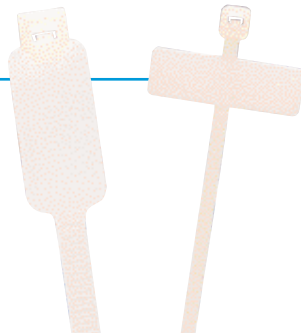
- Use where changes are expected
- Easy release and reuse



Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Qty./Bag	Cat. No.
Natural Nylon	5.9 in./149.8mm	.298 in./7.57mm	.050 in./1.27mm	1/8 - 1-1/4 in.	50 lbs.	100	IT1_5SRL-C
UV Black Nylon						100	IT1_5SRL-CO
Natural Nylon	7.9 in./200mm	.298 in./7.57mm	.053 in./1.35mm	1/8 - 2 in.	50 lbs.	100	IT2SRL-C
UV Black Nylon						100	IT2SRL-CO
Natural Nylon	11.9 in./301.6mm	.314 in./7.97mm	.054 in./1.37mm	1/8 - 3 in.	50 lbs.	100	IT3SRL-C
UV Black Nylon						100	IT3SRL-CO

## Identification Ties

- Write-on surface
- Bundle and identify at the same time



Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Pad Size	Qty./Bag	Cat. No.
Natural Nylon	4.0 in./102mm	.100 in./2.54mm	.044 in./1.12mm	1/16 - 7/8 in.	18 lbs.	5/16 in. x 1 in.	100	IT1MID-C
Natural Nylon	7.8 in./200mm	.181 in./4.59mm	.055 in./1.40mm	1/16 - 1-7/8 in.	50 lbs.	1/2 in. x 1/8 in.	100	IT2SID-C

## Powr-Tie™ Wrap-It Cable Ties

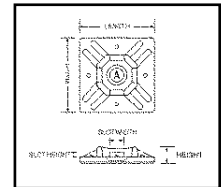
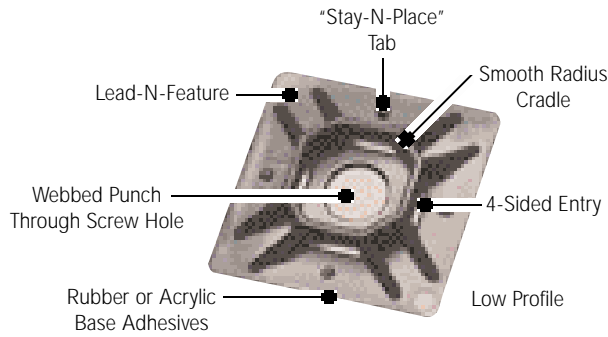
- Excellent in reusable applications
- Won't pinch fiber
- Low density Polyethelene hook with nylon knit loops



Description	Length	Width	Qty./Bag	Cat. No.
Black Hook-n-Loop Tie	6 in.	1/2 in.	20	15-020
Black Hook-n-Loop Tie	8 in.			15-040
Black Hook-n-Loop Tie	11 in.			15-030

## Mounting Pads

- Patented stay-in-place tab keeps cable ties from sliding down during vertical applications
- Lead-n-feature allows easy insertion for hard to reach applications
- Four-sided entry slots save time during placement orientation
- Smooth radius cradle eliminates possible damage to cable while providing stable support
- Webbed punch through screw hole allows maximum adhesive surface area, along with easy insertion of mechanical fasteners
- Low Profile is essential in confined spaces
- UL recognized, rubber adhesive positioning device

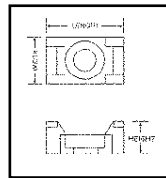


Description	Length	Width	Slot Height	Slot Width	Screw Size	Qty./Bag	Cat. No.
Natural Nylon	.74 in./19mm	.19 in./4.8mm	.05 in./1.2mm	.20 in./5.1mm	No. 4	100	IT750MP-C
UV Black Nylon						100	IT750MP-CO
Natural Nylon	.99 in./25mm	.20 in./5.0mm	.06 in./1.5mm	.20 in./5.1mm	No. 6	100	IT1000MP-C
UV Black Nylon						100	IT1000MP-CO

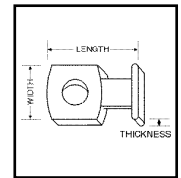


## Screw Mounting Bases - Standard and Low Profile

### Standard Screw Mount



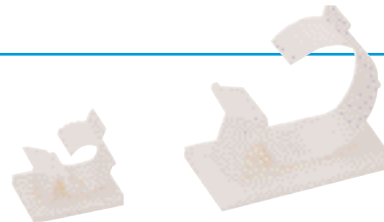
### Low Profile Mount



Description	Length	Width	Height	Slot Height	Slot Width	Screw Size	Qty./Bag	Cat. No.
Screw Mount Natural Nylon	.590 in./15mm	.370 in./9.40mm	.270 in./6.86mm	.062 in./1.59mm	.190 in./4.83mm	No. 6	100	IT1SMB-C
Screw Mount UV Black Nylon							100	IT1SMB-CO
Screw Mount Natural Nylon	.870 in./22mm	.640 in./16.26mm	.380 in./9.65mm	.125 in./3.18mm	.300 in./7.62mm	1/4"	100	IT2SMB-C
Screw Mount UV Black Nylon							100	IT2SMB-CO
Low Profile Mount	.750 in./19mm	.500 in./12.70mm	.120 in./3.04mm	.062 in./1.57mm	.180 in./4.57mm	No. 8	100	IT1LPMB-C

## Adjustable Quick Clip

- Locks securely and can be easily reopened for routing changes
- Adjustable to various diameters
- Natural color
- Thick adhesive back for quick installation



Bundle Range	Base Length	Base Width	Qty./Bag	Cat. No.
7/32 in. x 17/64 in. (.215 - .258)	7/8 in.	43/63 in.	100	15-100
5/16 in. x 13/32 in. (.312 - .406)	1 in.	3/4 in.	50	15-101
15/32 in. x 9/16 in. (.469 - .562)	1-1/4 in.	3/4 in.	20	15-102
37/64 in. x 3/4 in. (.578 - .75)	1-1/2 in.	3/4 in.	20	15-103

## Cable-Tie Installation Tools



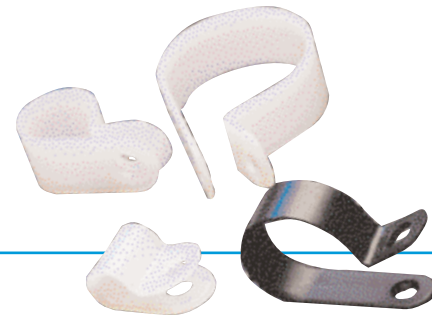
- Consistent, positive tension
- Flush cut-off leaves no projections to damage nearby wires or components
- Lightweight economy model for smaller jobs
- Standard and heavy-duty models feature rugged, die-cast aluminum construction with comfortable, cushioned grips
- Scrap tail stays in tool until trigger is released

Description	Cat. No.
Economy – use w/intermediate & standard ties*	<b>15-991</b>
Standard – use w/intermediate & standard ties	<b>41-990</b>
Heavy-duty – use w/standard & heavy-duty ties	<b>41-995</b>

\*Color may vary

## Clamps

- Use with #10 mounting screw



Description	Closed Diameter	Center to Center	Width	Thickness	Mounting Hole	Qty./Bag	Cat. No.
Natural Nylon	.125 in./3.18mm	.343 in./8.71mm	3/8 in.	.050 in./1.27mm	.203 in./5.16mm	100	<b>IT125CCL-C</b>
Natural Nylon	.250 in./6.35mm	.421 in./10.69mm	3/8 in.	.050 in./1.27mm	.203 in./5.16mm	100	<b>IT250CCL-C</b>
UV Black Nylon						100	<b>IT250CCL-CO</b>
Natural Nylon	.375 in./9.52mm	.500 in./12.70mm	1/2 in.	.060 in./1.52mm	.203 in./5.16mm	100	<b>IT375CCL2-C</b>
UV Black Nylon						100	<b>IT375CCL2-CO</b>
Natural Nylon	.500 in./12.70mm	.553 in./14.05mm	1/2 in.	.060 in./1.52mm	.203 in./5.16mm	100	<b>IT500CCL2-C</b>
UV Black Nylon						100	<b>IT500CCL2-CO</b>
Natural Nylon	.625 in./15.88mm	.625 in./15.88mm	1/2 in.	.060 in./1.52mm	.203 in./5.16mm	100	<b>IT625CCL2-C</b>
Natural Nylon	.750 in./19.05mm	.699 in./17.75mm	1/2 in.	.060 in./1.52mm	.203 in./5.16mm	100	<b>IT750CCL2-C</b>
Natural Nylon	1.000 in./25.40mm	.825 in./20.96mm	1/2 in.	.060 in./1.52mm	.203 in./5.16mm	100	<b>IT1000CCL2-C</b>

## IDEAL Cable Tie Catalog Numbering System

IT	2	S		C
<b>I = IDEAL INDUSTRIES, INC.</b> (at beginning of Catalog Number)	<b>Size</b> Approximate Bundle Diameter for ties	<b>TENSILE Strength</b> M = Miniature (18 lbs.) I = Intermediate (40 lbs.) S = Standard (50 lbs.) LH = Light-Heavy Duty (120 lbs.) H = Heavy Duty (175 lbs.) EH = Extra-Heavy Duty (250 lbs.)	<b>Style</b> _ = Standard Tie IL = In-Line MH = Mounting PM = Push Mount RL = Releasable ID = Identification MB = Mounting Base LPMB = Low Profile Mounting Base MP = Mounting Pad CCL = Cable Clamp	<b>Qty. Per Package</b> L = 50 C = 100 D = 500 M = 1000
<b>Family:</b> T = Standard One-Piece Cable Tie MET = Stainless Steel Barb Tie				<b>Color</b> _ = Natural 0 = UV Black 8 = Gray 30 = Heat Stabilized Black 701 = Halar

## Write-On I.D. Marker Plates



- Textured, matte surface accepts any type of ink, pencil or heat stamping
- Natural color allows for readable and convenient identification
- Use with miniature and intermediate cable ties

Description	Qty./Bag	Cat. No.
Natural – 1-1/4 in. x 1/2 in.	100	<b>15-693</b>



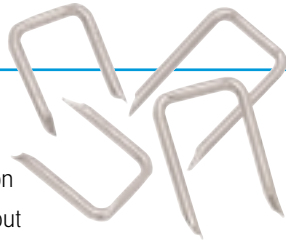
## Cable Staples

- Full line of quality insulated and non-insulated staples to fit all cabling applications
- Packaged to answer electrician's need for clean, dry, rust-free staples
- Convenient reclosable containers keep staples organized in the truck and on the job-site



## Carbon Steel Staples

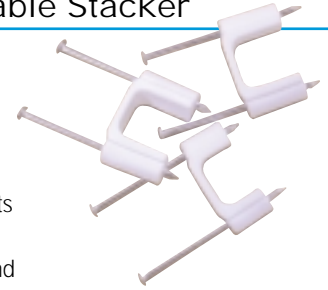
- Use with wider cable such as Romex®, NM and UF
- High-grade carbon steel construction
- Sharp-point legs drive straight without splitting wood
- Resist rust and corrosion



Description	Quantity/Package	Cat. No.
1/2 in. x 1 in.	100/Box	<b>BCS1-1</b>
1/2 in. x 1 in.	500/Jar	<b>BCS1-JR</b>
1/2 in. x 1 in.	500/Box	<b>BCS1-5</b>
1/2 in. x 1 in.	5,000/Bucket	<b>BCS1-5M</b>
9/16 in. x 1-1/4 in.	100/Box	<b>BCS2-1</b>
9/16 in. x 1-1/4 in.	400/Jar	<b>BCS2-JR</b>
9/16 in. x 1-1/4 in.	500/Box	<b>BCS2-5</b>
9/16 in. x 1-1/4 in.	5,000/Bucket	<b>BCS2-5M</b>

## Plastic Insulated Cable Stacker

- Use with wider cable such as Romex®, NM and UF
- High-grade carbon steel construction
- Smooth plastic saddle prevents damage to cable
- Zinc-plated nails resist rust and corrosion



Description	Quantity/Package	Cat. No.
1/2 in. 2 Cable Stacker	50/Bag	<b>BPS2/2-50</b>
1/2 in. 3 Cable Stacker	50/Bag	<b>BPS2/3-50</b>
1/2 in. 4 Cable Stacker	50/Bag	<b>BPS2/4-50</b>

## Plastic Insulated Staples

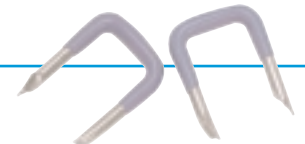
- Use with wider cable such as Romex®, NM and UF
- Smooth plastic saddle prevents damage to cable
- Zinc-plated nails resist rust and corrosion



Description	Quantity/Package	Cat. No.
1/2 in. Insulated	50/Bag	<b>BPS2-50</b>
1/2 in. Insulated	100/Bag	<b>BPS2-1</b>
1/2 in. Insulated	200/Jar	<b>BPS2-JR</b>
1/2 in. Insulated	400/Jar	<b>BPS2B-JR</b>
1/2 in. Insulated	500/Bag	<b>BPS2-5</b>
1/2 in. Insulated	5,000/Bucket	<b>BPS2-5M</b>
3/4 in. Insulated	50/Bag	<b>BPS3-50</b>
3/4 in. Insulated	100/Bag	<b>BPS3-1</b>
3/4 in. Insulated	175/Jar	<b>BPS3-JR</b>
3/4 in. Insulated	250/Bag	<b>BPS3-2</b>

## Insulated Staples

- Use with wider cable such as Romex®, NM and UF
- High-grade carbon steel with flexible PVC insulation
- Sharp-point legs drive straight without splitting wood
- Resist rust and corrosion



Description	Quantity/Package	Cat. No.
1/2 in. x 1 in.	100/Box	<b>B1CS-1</b>
1/2 in. x 1 in.	450/Jar	<b>B1CS-JR</b>
1/2 in. x 1 in.	500/Box	<b>B1CS-5</b>
1/2 in. x 1 in.	5,000/Bucket	<b>B1CS-5M</b>
9/16 in. x -1/4 in.	100/Box	<b>B1CS2-1</b>
9/16 in. x -1/4 in.	350/Jar	<b>B1CS2-JR</b>
9/16 in. x -1/4 in.	500/Box	<b>B1CS2-5</b>
9/16 in. x -1/4 in.	5,000/Bucket	<b>B1CS2-5M</b>

Romex® is a registered trademark of General Cable Co.

## Carbon Steel Service Entrance Staples

- Use with service entrance cable and conduit
- High-grade carbon steel construction
- Sharp-point legs drive straight without splitting wood
- Resist rust and corrosion



Description	Quantity/Package	Cat. No.
1-5/16 in. x 3/4 in.	100/Box	<b>BMSE150-1</b>
1-1/2 in. x 1-1/16 in.	100/Box	<b>BMSE175-1</b>

## Plastic Insulated Service Entrance Straps

- Use with service entrance cable and conduit
- Smooth plastic saddle prevents damage to cable
- Zinc-plated nails resist rust and corrosion



Description	Quantity/Package	Cat. No.
#6 SER & 1/2 in. EMT	50/Bag	<b>BSER6-50</b>
#6 & #8 SEU	50/Bag	<b>BSEU6-50</b>
#2 SER & 3/4 in. EMT	25/Bag	<b>BSER2-25</b>
#2 SEU	25/Bag	<b>BSEU2-25</b>
4/0 SER	5/Bag	<b>BSER4/0-5</b>
4/0 SEU	5/Bag	<b>BSEU4/0-5</b>

## Coaxial Cable Straps

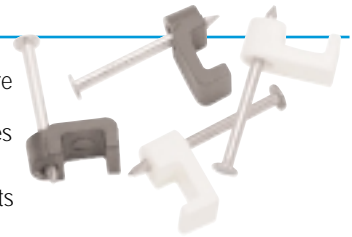
- Use with round cable such as CATV/VCR and phone cables or with plastic and metal tubing
- Smooth plastic saddle prevents damage to cable
- Zinc-plated nails resist rust and corrosion



Description	Quantity/Package	Cat. No.
1/4 in. Black	25/Clamshell	<b>772806</b>
1/4 in. Black	100/Clamshell	<b>772807</b>
1/4 in. Black	250/Jar	<b>BPCXSB-JR</b>
1/4 in. White	25/Clamshell	<b>772808</b>
1/4 in. White	100/Clamshell	<b>772809</b>
1/4 in. White	250/Jar	<b>BPCXSW-JR</b>
1/16 in. White	50/Bag	<b>BPS4-50</b>

## Sound Straps

- Use with smaller insulated wire and cord applications such as lamps, thermostats, telephones and sound systems
- Smooth plastic saddle prevents damage to wires
- Zinc-plated nails resist rust and corrosion



Description	Quantity/Package	Cat. No.
3/16 in. White	25/Clamshell	<b>772804</b>
3/16 in. White	100/Clamshell	<b>772805</b>
3/16 in. White	250/Jar	<b>BPLVSW-JR</b>
3/16 in. Black	25/Clamshell	<b>772810</b>
3/16 in. Black	100/Clamshell	<b>772812</b>
3/16 in. Black	250/Jar	<b>BPLVSB-JR</b>

## Fiber Insulated Cable Staples

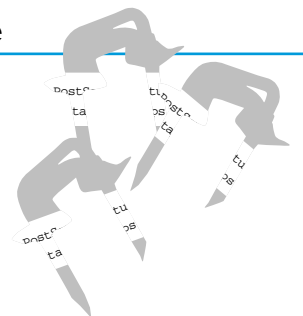
- Use with smaller wire and cord applications such as low voltage bells, thermostats, telephones and sound systems
- Insulated fiber provides enhanced strength and dielectric resistance
- Sharp-point legs drive straight without splitting wood
- Resist rust and corrosion



Description	Quantity/Package	Cat. No.
Brown Fiber	40/Clamshell	<b>772840</b>
White Fiber	40/Clamshell	<b>772841</b>

## Metal Insulated Staple

- Use with wider cable such as Romex®, NM and UF
- Resists rust and corrosion
- Blue plastic saddle prevents wire damage



Description	Quantity/Package	Cat. No.
1/2 in. Metal Staple w/Plastic Insulator	200/Jar	<b>BMICS-JR</b>

## Heat Shrinkable Tubing

### Thermo-Shrink® Heat Shrinkable Tubing Specifications

Properties	Thin Wall	Heavy Wall	End Caps
Shrink Temperatures	120°C to 250°C (200°C recommended)	120°C to 250°C (200°C recommended)	120°C to 250°C (200°C recommended)
Continuous Operating Temperature	-55°C to 135°C	-55°C to 110°C	-55°C to 110°C
Tensile Strength (PSI)	2,200 PSI min. 2,000 PSI min. (1/4 in.)	2,100 PSI min.	2,100 PSI
Ultimate Elongation	400% min.	600% min.	600% min.
Secant Modulus @ 2% Strain	25,000 PSI max.	25,000 PSI max.	N.A.
Specific Gravity	1.30 max.	1.20 max.	1.10 max.
Heat Aging, 168 hrs. @ 175°C Tensile Strength Elongation	350%	500%	500%
Heat Shock, 4 hrs. @ 225°C	No cracks, flowing or dripping	No cracks, flowing or dripping	No cracks, flowing or dripping
Flammability	Self-extinguishing	Self-extinguishing	Self-extinguishing
Low Temperature Brittle Point	-55°C	-55°C	-55°C
Volume Resistivity	10 <sup>14</sup> ohm-cm min.	10 <sup>13</sup> ohm-cm min.	10 <sup>14</sup> ohm-cm min.
Dielectric Strength	600V/mil min.	500V/mil min.	500V/mil min.
Corrosive Effect	Non-corrosive	Non-corrosive	Non-corrosive
Solvent Resistance 24 hrs. Immersion per MIL-DTL-23053	Good to excellent	Good to excellent	Good to excellent
Water Absorption	0.5%	0.5%	0.2%
Fungus Resistance	No growth	No growth	No growth
Longitudinal Change, 3 min.	+1%/-10%	+1%/-10%	+1%/-10%

All values are typical performance data and are not to be used as design data

## Thermo-Shrink® Thin-Wall Heat Shrinkable Tubing Disks



- Space-saving, no-waste dispenser holds up to four feet of thin-wall tubing
- TS-46 irradiated cross-linked polyolefin with 2:1 standard shrink ratio
- Forms tough, smooth insulated covering resistant to common fluids and solvents
- Flame-retardant material
- Meets UL 224, 125°C; CSA C22.2 No. 198.1, 125°C; MIL-DTL-23053/5 Class 1 & 2; AMS 3636 & 3637; DEF STAN 59-97, Issue 3, Type 2a
- Continuous operating temperature from -55°C to 135°C
- Shrink temperature of 120°C

Tubing Size (Inches)	Expanded I.D. (Min.)	Recovered I.D. (Max.)	Wire Size*	Nominal Recovered Wall Thickness	Cat. No.
3/64	.046	.023	22-18 AWG	.018	46-600
1/16	.063	.031	16 AWG	.018	46-601
3/32	.093	.046	14-12 AWG	.020	46-602
1/8	.125	.062	24-20 AWG	.020	46-603
3/16	.187	.093	20-14 AWG	.020	46-604
1/4	.250	.125	14-8 AWG	.025	46-605
5/16	.312	.156	4-1 AWG	.025	46-606
3/8	.375	.187	8-4 AWG	.025	46-607
1/2	.500	.250	4-1 AWG	.025	46-608
3/4	.750	.375	2-250 KCMIL	.030	46-609
1	1.000	.500	2/0-500 KCMIL	.035	46-610

\*Consult the wire manufacturer's catalog for specific O.D. of wire and insulation

## Thermo-Shrink® Underground Splices

- Direct burial rated
- Heavy-wall heat shrinkable tubing – TS-46 irradiated cross-linked polyolefin with 3:1 standard shrink ratio
- Adhesive liner provides complete insulation and protection
- Simple one-piece design saves time and money

Description	Cat. No.
U.F. Splice Kit (UL Listed) – 14 to 8 AWG	46-400
Al/Cu Underground Splice Kit – 8 to 2 AWG, 600V	46-401
Underground Splice Kit – 4 AWG to 1/0, 600V	46-402
Underground Splice Kit – 1/0 to 250 KCMIL, 600V	46-403



## Thermo-Shrink® Thin-Wall Heat Shrinkable Tubing



- TS-46 irradiated cross-linked polyolefin with 2:1 standard shrink ratio
- Forms tough, smooth insulated covering resistant to common fluids and solvents
- Flame-retardant material
- Meets UL 224, 125°C; CSA C22.2 No. 198.1, 125°C; MIL-DTL-23053/5 Class 1 & 2; AMS 3636 & 3637; DEF STAN 59-97, Issue 3, Type 2a
- Continuous operating temperature from -55°C to 135°C
- Shrink temperature of 120°C

Tubing Size (In.)	Expanded I.D. (Min.)	Recovered I.D. (Max.)	Nominal Recovered Wall Thickness	Wire Size*	Length	Cat. No.
1/8	.125	.062	.020	24-20 AWG	6 in.	<b>46-310</b>
					2 ft.	<b>46-311</b>
					1,000 ft.	<b>46-312</b>
3/16	.187	.093	.020	20-14 AWG	6 in.	<b>46-313</b>
					2 ft.	<b>46-314</b>
					1,000 ft.	<b>46-315</b>
1/4	.250	.125	.025	14-8 AWG	6 in.	<b>46-316</b>
					2 ft.	<b>46-317</b>
					500 ft.	<b>46-318</b>
3/8	.375	.187	.025	8-4 AWG	6 in.	<b>46-319</b>
					2 ft.	<b>46-320</b>
					200 ft.	<b>46-321</b>
1/2	.500	.250	.025	4-1 AWG	6 in.	<b>46-322</b>
					2 ft.	<b>46-323</b>
					200 ft.	<b>46-324</b>
3/4	.750	.375	.030	2-250 MCM	6 in.	<b>46-325</b>
					2 ft.	<b>46-326</b>
					200 ft.	<b>46-327</b>
1	1.000	.500	.035	2/0-500 MCM	6 in.	<b>46-328</b>
					2 ft.	<b>46-329</b>
					100 ft.	<b>46-330</b>

\*Consult the wire manufacturer's catalog for specific O.D. of wire and insulation



## Thermo-Shrink® Heavy-Wall Heat Shrinkable Tubing



- TS-46 irradiated cross-linked polyolefin with 3:1 standard shrink ratio
- Adhesive liner provides complete insulation and protection to electrical splices in above-grade, underground or underwater applications
- Maximum flame retardancy
- Meets UL 486D, CSA C22.2 No. 198.2, ANSI C119.1, Western Underground Guides Nos. 2.4, 2.5, MIL-DTL-23053/15, IEEE 383 Vertical Flame Test, ANSI C37.20.2, ICEA S-19-8 and NEMA insulation thickness requirements
- Continuous operating temperature from -55°C to 110°C
- Rated for 600V, 90°C continuous use
- Shrink temperature of 120°C

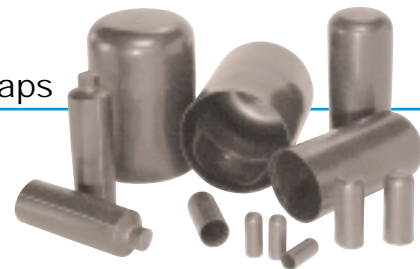
Model	Expanded I.D. (Min.)	Recovered I.D. (Max.)	Nominal Recovered Wall Thickness	Cable Sizes*	Length (Inches)	Cat. No.
TS-46-400	.400	.150	.060	8-6 AWG	6	<b>46-343</b>
					9	<b>46-344</b>
					48	<b>46-346</b>
TS-46-750	.750	.240	.090	6-2 AWG	6	<b>46-347</b>
					9	<b>46-348</b>
					48	<b>46-350</b>
TS-46-1100	1.100	.350	.120	1-3/0 AWG	6	<b>46-351</b>
					9	<b>46-352</b>
					48	<b>46-354</b>
TS-46-1500	1.500	.470	.160	2/0-350 MCM	9	<b>46-356</b>
					12	<b>46-357</b>
					48	<b>46-358</b>
TS-46-2000	2.000	.630	.160	250-500 MCM	9	<b>46-369</b>
					18	<b>46-371</b>
					48	<b>46-372</b>

\*Consult the wire manufacturer's catalog for specific O.D. of wire and insulation



## Thermo-Shrink® Medium-Wall Heat Shrinkable End Caps

- TS-46 irradiated cross-linked polyolefin
- Adhesive liner provides complete environmental protection and insulation
- Provide water-tight seal and resist corrosion, oils and chemicals
- Heat indicating lines
- Protect cable ends during storage
- Continuous operating temperature from -55°C to 110°C
- Rated for 600/1,000V, 90°C continuous use
- Shrink temperature of 120°C



Expanded I.D. (Min.)	Recovered I.D. (Max.)	Recovered Wall Thickness	Cable Sizes	Length (Inches)	Cat. No.
.40	.15	.080	8-1 AWG	3.0	<b>46-381</b>
1.10	.40	.080	2/0-500 MCM	4.0	<b>46-382</b>
1.50	.50	.080	500-1,500 MCM	4.5	<b>46-383</b>
2.75	1.00	.080	2,000-2,500 MCM	5.0	<b>46-384</b>
4.70	1.57	.080	—	6.5	<b>46-387</b>



## Thermo-Shrink® Heat Shrink Kit

Kit includes:

- Eleven sizes of thin-wall heat shrinkable tubing disks (3/64 in. – 1 in.)
- Small deflector
- Premium T®-Cutter Wire Cutter



Description	Cat. No.
Kit includes: 45-223, 46-203, 46-923, 46-941, & 46-600 through 46-610	<b>46-007</b>

## Heat Elite Heat Gun



- Temperature range — 930°F (500°C)
- Two-step switch for heat and air flow adjustments
- Double-insulated power cord
- Ergonomical distribution of weight
- Comfortable non-slip handle for ease of use
- UL and CUL Listing

Description	Cat. No.
Heat Elite	<b>46-202</b>
Heat Elite, 230V	<b>46-205</b>



Accessories

Description	Cat. No.
Small Deflector, 1-1/4 in. diameter (For use with all Heat Elite Heat Guns)	<b>46-941</b>
Reduction Adapter (For use with 46-203 and 46-204)	<b>46-950</b>
Glass Protection Adapter (For use with all Heat Elite Heat Guns)	<b>46-951</b>
Welding Adapter (For use with 46-203 and 46-204)	<b>46-952</b>
Solder Reflector Adapter (For use with 46-204)	<b>46-953</b>
Wide-shot Adapter (For use with all Heat Elite Heat Guns)	<b>46-954</b>
Overlap Adapter (For use with 46-203 and 46-204)	<b>46-955</b>
Pressure Roller (For use with 46-204)	<b>46-956</b>

## Heat Elite Pro Heat Gun



- Temperature range — 180°F - 1020°F (100 - 550°C)
- Two-step switch for heat and air flow adjustments
- Double-insulated power cord
- Ergonomical distribution of weight
- Comfortable non-slip handle for ease of use
- Potentiometer for infinitely temperature adjustment
- UL and CUL Listing

Description	Cat. No.
Heat Elite Pro	<b>46-203</b>
Heat Elite Pro, 230V	<b>46-206</b>

## Heat Elite Plus Heat Gun



- Temperature range — 180°F - 1200°F (80 - 650°C)
- Double-insulated power cord
- Ergonomical distribution of weight
- Comfortable non-slip handle for ease of use
- LCD display with memory functions
- Temperature and airflow adjustments
- Stand-by mode to minimize the energy consumption
- Ceramic heating element ensures long-term coil performance
- UL and CUL Listing

Description	Cat. No.
Heat Elite Plus LCD	<b>46-204</b>
Heat Elite Plus LCD, 230V	<b>46-207</b>



## Wire Marker Booklets

- Convenient pocket-size booklets
- Plastic-impregnated cloth construction for long-lasting durability
- Resists abrasion, moisture, dirt and oil
- Perforated 1-1/2 in. markers can be separated into half-length sizes
- Non-smear black legend ensures high visibility
- Self-sticking on wire and cable
- For applications above or below ground

### Specifications:

Temperature Range: -40°F to 180°F (-40°C to 82°C)

Adhesion: 45 oz./in. width ultimate



### Legend Assortments\*

Legend	Quantity	Cat. No.
0-9	45 Markers each	44-101
A-Z 0-15 +, -, /	10 Markers each	44-102
1-45	10 Markers each	44-103
46-90	10 Markers each	44-104
1, 2, 3	150 Markers each	44-105
A, B, C	150 Markers each	44-106
T1, T2, T3	150 Markers each	44-107
L1, L2, L3	150 Markers each	44-108
1-15 16-90 A-Z +, -, /, 0	6 Markers each 4 Markers each 2 Markers each 2 Markers each	44-109
1, 2, 3 A, B, C T1, T2, T3 L1, L2, L3	45 Markers each 45 Markers each 30 Markers each 30 Markers each	44-110
+, -, AC, DC POS, NEG, GND NEUT SPARE, BLANK	45 Markers each 33 Markers each 27 Markers each 21 Markers each	44-111

\*Ten pages per booklet with each page bearing the legend assortment indicated. All booklets (except 44-111) contain 450 wire markers and 450 terminal markers. Booklet 44-111 includes 348 wire markers and 348 terminal markers.

### Solid Letters and Numbers\*

Legend	Cat. No.	Legend	Cat. No.	Legend	Cat. No.
A	44-112	M	44-124	Y	44-136
B	44-113	N	44-125	Z	44-137
C	44-114	O	44-126	0	44-138
D	44-115	P	44-127	1	44-139
E	44-116	Q	44-128	2	44-140
F	44-117	R	44-129	3	44-141
G	44-118	S	44-130	4	44-142
H	44-119	T	44-131	5	44-143
I	44-120	U	44-132	6	44-144
J	44-121	V	44-133	7	44-145
K	44-122	W	44-134	8	44-146
L	44-123	X	44-135	9	44-147

\*Ten pages per booklet with each page bearing the legend assortment indicated. All booklets contain 450 wire markers and 450 terminal markers.

## Load Centers

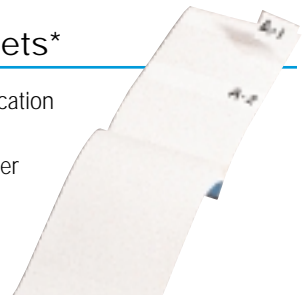
- Contains common household legends — bedroom, living room, dryer, water heater, security system, etc.



Description	Cat. No.
Load Center Wire Marker Booklet	44-154

## Write-On Marker Booklets\*

- Use for developing personal identification systems
- Surface accepts pen, pencil or rubber stamp



Marker Size* (Inches)	Markers per page	Pages per book	Cat. No.
1 x 2-1/2	6	10	44-151
1 x 5	3	10	44-152
1 x 2-1/2 & 1 x 5	6 3	5 5	44-153

\*Write-on area for 2-1/2 in. markers is 3/4 in. x 1 in. Write-on area for 5 in. markers is 1 in. x 1 in. Adhesion: .25 oz./in. width ultimate

## Wire Marker Cards

- Use for positive identification and keying of wires, terminal blocks, etc.
- Convenient pocket-size cards
- Bold, easy-to-read black characters
- Self-sticking on wire and cable
- Polyester film over laminate/cloth construction for long-term durability
- Resists abrasion, moisture, dirt and oil
- Individual markers measure 1-1/2 in. long

### Specifications:

Temperature Range: -40°F to 180°F (-40°C to 82°C)  
Adhesion: 45 oz./in. width ultimate

### Consecutive Numbers

Legend	Markers per legend	Markers per card	Cat. No.
0-9 (Repeated)	3	30	43-953
1-33	1	33	43-875
34-66	1	33	43-876
67-99	1	33	43-877
100-124	1	25	43-878
125-149	1	25	43-879
150-174	1	25	43-880
175-199	1	25	43-881
200-224	1	25	43-882
225-249	1	25	43-883

### Solid Numbers

Legend	Cat. No.	Legend	Cat. No.	Legend	Cat. No.	Legend	Cat. No.	Legend	Cat. No.
0	43-000	A	43-601	K	43-611	U	43-621	L1	43-747
1	43-001	B	43-602	L	43-612	V	43-622	L2	43-748
2	43-002	C	43-603	M	43-613	W	43-623	L3	43-749
3	43-003	D	43-604	N	43-614	X	43-624	T1	43-772
4	43-004	E	43-605	O	43-615	Y	43-625	T2	43-773
5	43-005	F	43-606	P	43-616	Z	43-626	T3	43-774
6	43-006	G	43-607	Q	43-617	A-Z	43-960		
7	43-007	H	43-608	R	43-618	A1	43-692		
8	43-008	I	43-609	S	43-619	A2	43-693		
9	43-009	J	43-610	T	43-620	A3	43-694		

## Write-On Marker Cards

- Use for developing personal identification systems
- Cloth write-on surface
- Accepts most writing instruments



Marker Size (Inches)	Markers per card	Cat. No.
1 x 1-1/2	9	44-752
5/8 x 1-1/2	14	44-753

## Marking Pens

- Fast-drying, permanent ink will not smear
- Use on write-on marker cards and write-on cable-tie marker plates
- Color-coded in red or black



Description	Cat. No.
Marking Pen w/black ink	41-697
Marking Pen w/red ink	41-698

## Wire Marker Dispensers



- Convenient pocket-size case (3 in. x 6 in.) holds 10 wire marker rolls
- Dispenser tab holds tapes firmly in place — allows removal of proper tape length without waste
- Flip top for easy access and refill
- Built-in hook for hanging from belt or tool pouch
- High-quality adhesive and 3 mil. thickness provide long-lasting, low-profile application
- Each plastic reel holds 8 ft. of polyester tape

### Specifications:

Temperature Range: -40°F to 180°F (-40°C to 82°C)  
Adhesion: 25 oz./in. width ultimate

Description	Cat. No.
Dispenser w/0 through 9 legend rolls	42-301
Dispenser only	42-303

## Wire Marker Dispenser Refill Rolls



Description/Legend	Cat. No.
Refill pack with 1 each of 0-9 legend rolls	42-399

Legend	Cat. No.	Legend	Cat. No.
0	42-400	5	42-405
1	42-401	6	42-406
2	42-402	7	42-407
3	42-403	8	42-408
4	42-404	9	42-409

## Bin Markers

- Use for customizing identification system at job site or in warehouse
- High-adhesion properties with easy removability
- Vinyl-impregnated cloth construction for long-term durability
- Resist abrasion, moisture, dirt and oil
- Non-smear, black legend on bright yellow background for high visibility

### Extra Large:

6 markers/cd.  
1-1/2 in. x 3-1/2 in. each  
w/3 in. type



### Medium:

10 markers/cd.  
7/8 in. x 1-1/2 in. each  
w/1 in. type



### Large:

10 markers/ cd.  
7/8 in. x 2-1/4 in. each w/2 in. type



### Small:

32 markers/cd.  
9/16 in. x 3/4 in. each  
w/5/8 in. type

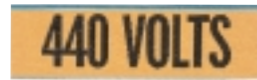


Legend	Extra Large Cat. No.	Large Cat. No.	Medium Cat. No.	Small Cat. No.
<b>Solid Numbers</b>				
0	44-590	44-580	44-570	44-560
1	44-591	44-581	44-571	44-561
2	44-592	44-582	44-572	44-562
3	44-593	44-583	44-573	44-563
4	44-594	44-584	44-574	44-564
5	44-595	44-585	44-575	44-565
6	44-596	44-586	44-576	44-566
7	44-597	44-587	44-577	44-567
8	44-598	44-588	44-578	44-568
9	44-599	44-589	44-579	44-569
<b>Combinations</b>				
1 thru 5 (3 cards ea.) and 6 thru 0 (2 cards ea.)	44-734	44-733	44-732	44-731
A thru Z (1 card ea.)	44-739	44-738	44-737	44-736

## Voltage and Conduit Markers

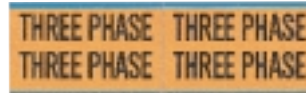
### Large:

1 marker per card  
2-1/4 in. x 9 in. each w/1-3/4 in. type



### Medium:

4 markers per card  
1-1/8 in. x 4-1/2 in. each w/3/4 in. type



### Small:

18 markers per card  
2-1/4 in. x 1/2 in. each w/5/16 in. type



- Identify junction boxes, switches, circuit breakers, raceways, pipe and fuse boxes
- Non-conductive for user safety
- High-adhesion properties with easy removability
- Vinyl-impregnated cloth construction provides long-lasting durability
- Resist abrasion, moisture, dirt and oil
- Non-smear, black legend on bright orange background for high visibility

### Specifications:

Temperature Range: -40°F to 180°F (-40°C to 82°C)  
Adhesion: 45 oz./in. width ultimate

Legend	Large Cat. No.	Medium Cat. No.	Small Cat. No.
120/208V	44-295	44-296	44-297
277/480V	44-298	44-299	44-300
110V	44-301	44-351	44-401
120V	44-303	44-353	44-403
208V	44-305	44-355	44-405
220V	44-306	44-356	44-406
230V	44-307	44-357	44-407
240V	44-308	44-358	44-408
277V	44-310	44-360	44-410
380V	44-311	44-361	44-411
440V	44-312	44-362	44-412
460V	44-313	44-363	44-413
480V	44-314	44-364	44-414
600V	44-317	44-367	44-417
2,400V	44-321	N/A	N/A
4,160V	44-322	N/A	N/A
13,800V	44-328	N/A	N/A
DANGER	44-289	N/A	N/A
HIGH VOLTAGE	44-292	N/A	N/A
SINGLE PHASE	44-340	44-390	44-440
THREE PHASE	44-342	44-392	44-442

## Flash Protection Labels and Signs

**National Electric Code 110.16 Flash Protection:** *Switchboards, panel boards, industrial control panels, and motor control centers*, in other than dwelling occupancies, that are likely to require examination, adjustment, servicing or maintenance while energized, shall be field marked to warn qualified persons of potential electric arc flash hazards. The marking shall be located so as to be clearly visible to qualified persons before examination, adjustment, servicing or maintenance of the equipment.

### Required Labels – 44-892/44-893



### Recommended Signs – 44-896/44-897

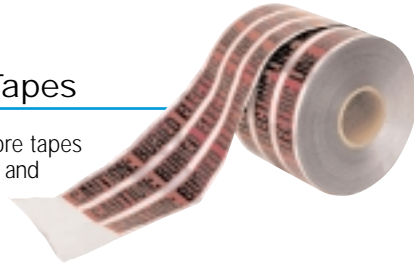


### Arc Flash Labels 44-894/44-895



Description	Type	Size	Qty./Bag	Cat. No.
NEC Arc Flash, Warning	Self-Sticking polyester	3-1/2 in. x 5 in.	5	44-892
NEC Arc Flash, Warning	Self-Sticking polyester	5 in. x 7 in.	5	44-893
NEC Arc Flash, Danger	Self-Sticking polyester	5 in. x 7 in.	5	44-894
NEC Arc Flash, Danger	Self-Sticking polyester	4 in. x 6 in.	5	44-895
NEC Arc Flash, Warning	Self-Sticking polyester	7 in. x 10 in.	1	44-896
NEC Arc Flash, Warning	Fiberglass	10 in. x 14 in.	1	44-897

## Detectable Underground Tapes



- Solid aluminum foil core tapes for protection, location and identification of underground utility installations
- Meets or exceeds industry standards including the American Public Works Association (APWA) color code
- Formulated to resist degradation from acid and alkali found in soils
- Lead-free pigments and organic lead-free ink

Property	Method	Value
Thickness	ASTMD2103	5.0 Mills
Elongation	ASTMD882-75B	80%
Composition	IDEAL Specs.	Bottom layer virgin PE Top layer virgin PET Foil industry standard
Tensile Strength	ASTMD882	35 lbs./in. (15,000 PSI)

Legend	Color	Size	Cat. No.
Caution Buried Electric Line Below	Red	3 in. x 1,000 ft.	<b>42-201</b>
Caution Buried Electric Line Below	Red	6 in. x 1,000 ft.	<b>42-251</b>

## Non-Detectable Underground Tapes



- For protection, location and identification of underground utility installations
- Formulated to resist degradation from acid and alkali found in soils
- Lead-free pigments and organic lead-free ink

Property	Method	Value
Thickness	ASTMD2103	4.0 Mills
Elongation	ASTMD882-75B	500%
Composition	IDEAL Specs.	100% virgin LDPE
Tensile Strength	ASTMD882	2,750 PSI

### Recommended Burial Depth

3 in. Tape – 4 in. to 6 in.

6 in. Tape – less than 12 in.

Legend	Color	Size	Cat. No.
Caution Buried Electric Line Below	Red	3 in. x 1,000 ft.	<b>42-101</b>
Caution Buried Electric Line Below	Yellow	3 in. x 1,000 ft.	<b>42-102</b>
Caution Buried Telephone Line Below	Orange	3 in. x 1,000 ft.	<b>42-103</b>
Caution Buried Fiber Optic Line Below	Orange	3 in. x 1,000 ft.	<b>42-104</b>
Caution Buried Electric Line Below	Red	6 in. x 1,000 ft.	<b>42-151</b>
Caution Buried Electric Line Below	Yellow	6 in. x 1,000 ft.	<b>42-152</b>

## Barricade Tapes



- High-visibility safety yellow or red polyethylene construction with bold black letters
- Meets OSHA specifications Section 1010.144 for marking physical hazards

Property	Method	Value
Elongation	ASTM D88-75B	≥ 400%
Composition	IDEAL Specs.	100% virgin LDPE
Tensile Strength	ASTM D882	2,350 PSI TD 1,893 PSI MD

Legend	Color	Size	Thickness	Cat. No.
Caution	Yellow	3 in. x 1,000 ft.	4.0 Mills	<b>42-001</b>
Caution Do Not Enter	Yellow	3 in. x 1,000 ft.	4.0 Mills	<b>42-002</b>
Caution High Voltage	Yellow	3 in. x 1,000 ft.	4.0 Mills	<b>42-003</b>
Danger	Red	3 in. x 1,000 ft.	4.0 Mills	<b>42-051</b>
Danger High Voltage 277V/480V Keep Out	Red	3 in. x 1,000 ft.	4.0 Mills	<b>42-052</b>

Legend	Color	Size	Thickness	Cat. No.
Caution	Yellow	3 in. x 1,000 ft.	2.0 Mills	<b>42-011</b>
Caution Do Not Enter	Yellow	3 in. x 1,000 ft.	2.0 Mills	<b>42-012</b>
Danger	Red	3 in. x 1,000 ft.	2.0 Mills	<b>42-015</b>



## Basic Lockout/Tagout Kit



- A great selection of the most popular lockout/tagout devices
- Small nylon zipper pouch features belt loops and rings to clip to belt or tool pouch

Description		Cat. No.
Basic Lockout/Tagout Kit		<b>44-970</b>
<b>Kit 44-970 Includes:</b>	<b>Qty.</b>	<b>Cat. No.</b>
Hinged Single-Pole Breaker Lockout	2	<b>44-810</b>
Universal 277V Breaker Lockout/Single Pole	1	<b>44-809</b>
480/600V Breaker Lockout	1	<b>44-807</b>
Wall Switch Lockout	1	<b>44-789</b>
3/4 in. Red Padlock	1	<b>44-906</b>
1 in. Safety Lockout Hasp	1	<b>44-800</b>
Lockout Tags – Do Not Operate (striped)	5	<b>44-833</b>
Universal Multi-Pole Breaker Lockout	1	<b>44-783</b>
110V Plug Lockout	1	<b>44-818</b>
Zipper Pouch	1	<b>IA-3240</b>

Quantities listed in kit description are for individual pieces, not carded packages.

Description		Cat. No.
Basic Plus Lockout/Tagout Kit		<b>44-979</b>
<b>Kit 44-979 Includes all 44-970 PLUS:</b>	<b>Qty.</b>	<b>Cat. No.</b>
Gate Valve Lockout	1	<b>44-824</b>
Ball Valve Lockout	1	<b>44-820</b>

## Starter Lockout/Tagout Kit

Description		Cat. No.
Starter Lockout/Tagout Kit		<b>44-973</b>
<b>Kit 44-973 Includes:</b>	<b>Qty.</b>	<b>Cat. No.</b>
Universal 277V Breaker/Single-Pole Lockout	1	<b>44-809</b>
Universal Multi-Pole Lockout	1	<b>44-783</b>
3/4 in. Shackle Red Padlock	1	<b>44-906</b>
1 in. Safety Lockout Hasp	1	<b>44-800</b>
Lockout Tags – Do Not Operate (striped)	2	<b>44-833</b>
110V Plug Lockout	1	<b>44-818</b>
Zipper Pouch	1	<b>IA-3240</b>

Quantities listed in kit description are for individual pieces, not carded packages.

## Standard Lockout/Tagout Kit



- Excellent selection of lockout/tagout devices, tags and locks for maintenance workers or contractors
- Small nylon zipper pouch features belt loops and rings to clip to belt or tool pouch

Description		Cat. No.
Standard Lockout/Tagout Kit		<b>44-971</b>
<b>Kit 44-971 Includes:</b>	<b>Qty.</b>	<b>Cat. No.</b>
Hinged Single-Pole Breaker Lockout	3	<b>44-810</b>
Universal 277V Breaker Lockout/Single Pole	2	<b>44-809</b>
480/600V Breaker Lockout	1	<b>44-807</b>
Wall Switch Lockout	1	<b>44-789</b>
110V Small Plug Lockout	1	<b>44-718</b>
2 in. Shackle Red Padlocks	2	<b>44-906</b>
1 in. Safety Lockout Hasps	2	<b>44-800</b>
Lockout Tags – Do Not Operate	5	<b>44-830</b>
Lockout Tags – Do Not Operate (striped)	5	<b>44-833</b>
Cleat for 277V Breaker Lockout	1	<b>44-785</b>
Cleat for 480/600V Breaker Lockout	1	<b>44-786</b>
Universal Multi-Pole Breaker Lockout	2	<b>44-783</b>
Zipper Pouch	1	<b>IA-3240</b>

Quantities listed in kit description are for individual pieces, not carded packages.



- A starter selection of the lockout/tagout devices every electrician/maintenance person needs
- Small nylon zipper pouch features belt loops and rings to clip to belt or tool pouch

## Plant Facility Lockout/Tagout Kit

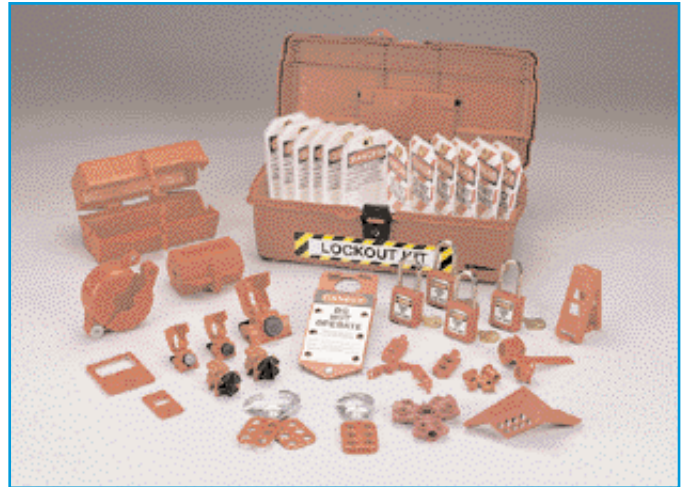


- Ideal for plant facility personnel to keep all lockout/tagout devices in one convenient place
- Polypropylene plastic tool box resists oil and chemicals

Description		Cat. No.
Plant Facility Lockout/Tagout Kit		<b>44-972</b>
<b>Kit 44-972 Includes:</b>	<b>Qty.</b>	<b>Cat. No.</b>
Hinged Single-Pole Breaker Lockout	5	<b>44-810</b>
Universal 277V Breaker/Single Pole Lockout	3	<b>44-809</b>
480/600V Breaker Lockout	1	<b>44-807</b>
Wall Switch Lockout	2	<b>44-789</b>
110V Plug Lockout	1	<b>44-718</b>
1 in. Safety Lockout Hasps	3	<b>44-800</b>
Red Labeled Lockout	2	<b>44-791</b>
220/550V Plug Lockout	1	<b>44-819</b>
Lockout Tags – Do Not Operate	10	<b>44-830</b>
Lockout Tags – Do Not Operate (striped)	10	<b>44-833</b>
Fuse Blockout	2	<b>44-815</b>
Fuse Blockout	2	<b>44-816</b>
Gate Valve Lockout	1	<b>44-824</b>
Cleat for 277V Breaker Lockout	1	<b>44-785</b>
Cleat for 480/600V Breaker Lockout	1	<b>44-786</b>
Universal Multi-Pole Breaker Lockout	3	<b>44-783</b>
Tool Box	1	<b>IA-3241</b>

Quantities listed in kit description are for individual pieces, not carded packages.

## Industrial Lockout/Tagout Kit



- An industrial selection of lockout/tagout devices
- Polypropylene plastic tool box resists oil and chemicals

Description		Cat. No.
Industrial Lockout/Tagout Kit		<b>44-974</b>
<b>Kit 44-974 Includes:</b>	<b>Qty.</b>	<b>Cat. No.</b>
Hinged Single-Pole Breaker Lockout	3	<b>44-810</b>
Universal 277V Breaker/Single Pole Lockout	2	<b>44-809</b>
480/600V Breaker Lockout	1	<b>44-807</b>
Wall Switch Lockout	1	<b>44-789</b>
110V Small Plug Lockout	1	<b>44-718</b>
Pneumatic Lockout	1	<b>44-774</b>
Ball Valve Lockout	1	<b>44-820</b>
1 in. Safety Lockout Hasp	2	<b>44-800</b>
Red Labeled Lockout	1	<b>44-791</b>
220/550V Plug Lockout	1	<b>44-819</b>
Lockout Tags – Do Not Operate (striped)	10	<b>44-833</b>
Fuse Blockout	1	<b>44-815</b>
Fuse Blockout	1	<b>44-816</b>
Gate Valve Lockout	1	<b>44-824</b>
Cleat for 277V Breaker Lockout	1	<b>44-785</b>
Cleat for 480/600V Breaker Lockout	1	<b>44-786</b>
Red Lockout Padlocks	4	<b>44-916</b>
Universal Multi-Pole Breaker Lockout	2	<b>44-783</b>
Tool Box	1	<b>IA-3241</b>

Quantities listed in kit description are for individual pieces, not carded packages.

## Industrial Lockout/Tagout Station



- Large Lockout/Tagout Station can be wall mounted or easily transported
- All metal, lockable cabinets come with two adjustable shelves (extra shelves available)
- Lockout safety tips are conveniently located inside of door for frequent reminders of proper lockout procedures

Description	Cat. No.	
Industrial Lockout/Tagout Station – 16" H x 14" W x 6" D	<b>44-975</b>	
<b>Kit 44-975 Includes:</b>	<b>Qty.</b>	<b>Cat. No.</b>
Hinged Single-Pole Breaker Lockout	2	<b>44-810</b>
Universal Single-Pole Breaker Lockout	2	<b>44-809</b>
Cleat for Universal Single-Pole Lockout	2	<b>44-785</b>
Universal Multi-Pole Breaker Lockout	2	<b>44-783</b>
480/600V Breaker Lockout	1	<b>44-807</b>
Cleat for 480/600V Breaker Lockout	1	<b>44-786</b>
Wall Switch Lockout	1	<b>44-789</b>
1 in. Safety Lockout Hasp	3	<b>44-800</b>
Red Safety Padlocks	4	<b>44-916</b>
100V Small Plug Lockout	1	<b>44-718</b>
220/550V Plug Lockout	1	<b>44-819</b>
Lockout Tags – Do Not Operate	10	<b>44-833</b>
Gate Valve Lockout - 1 in. to 2-1/2 in.	1	<b>44-824</b>
Gate Valve Lockout - 2-1/2 in. to 5 in.	1	<b>44-825</b>
Ball Valve Lockout	1	<b>44-820</b>
Pneumatic Lockout	1	<b>44-774</b>
Cabinet w/two shelves	1	<b>IA-4989</b>

Description	Qty.	Cat. No.
Extra shelf	1	<b>IA-4990</b>

## Machine Lockout Station

- Conveniently mounts on either a wall, machinery or table top
- Yellow acrylic station helps maintain a focal point for storing your plug lockout between usage applications



Description	Cat. No.	
Machine Lockout/Tagout Station – 8-1/2" H x 8-1/2" W x 4" D	<b>44-976</b>	
<b>Kit 44-976 Includes:</b>	<b>Qty.</b>	<b>Cat. No.</b>
Red Safety Padlock	1	<b>44-916</b>
220/550V Plug Lockout	1	<b>44-819</b>
Lockout Tag – Do Not Operate	2	<b>44-833</b>
Machine Lockout Tagout Board only	1	<b>IA-4991</b>

## Circuit Breaker Lockout Station

- Polystyrene board is designed to be mounted on or near electrical breaker boxes for instant, easy access
- Comply with article 430.102B of the 2002 NEC



Description	Cat. No.	
Circuit Breaker Lockout/Tagout Station – 8" H x 6-1/4" W x 2-3/4" D	<b>44-977</b>	
<b>Kit 44-977 Includes:</b>	<b>Qty.</b>	<b>Cat. No.</b>
Hinged Single-Pole Breaker Lockout	2	<b>44-810</b>
Universal Single-Pole Breaker Lockout	2	<b>44-809</b>
Universal Multi-Pole Breaker Lockout	2	<b>44-783</b>
Lockout Tag – Do Not Operate	5	<b>44-833</b>
Red Safety Padlock	1	<b>44-916</b>
Circuit Breaker Lockout/Tagout only	1	<b>IA-4992</b>

## Micro Lockout Station

- Compact design can be mounted on or close by your lockout job
- Holds just the necessary equipment to do a specific job/function

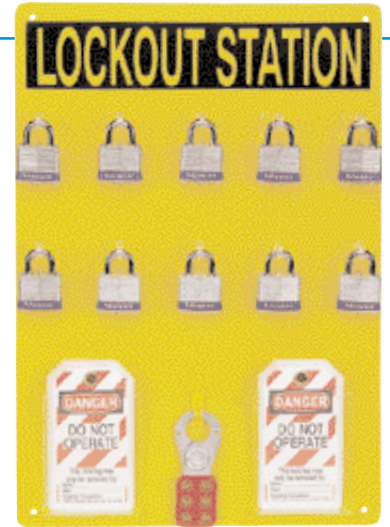


Description	Cat. No.	
Micro Lockout Station - 8" H x 6-1/4" W x 2-3/4" D	<b>44-978</b>	
<b>Kit 44-978 Includes:</b>	<b>Qty.</b>	<b>Cat. No.</b>
1 in. Safety Lockout Hasp	1	<b>44-800</b>
Red Safety Padlock	1	<b>44-916</b>
Lockout Tags – Do Not Operate	2	<b>44-833</b>
Micro Lockout/Tagout Board only	1	<b>IA-4993</b>



## Lock Stations

- Provide accessible convenient storage of locks, tags and safety lockouts
- Durable acrylic constructions



Description	Cat. No.
Four-Lock Station (board only)	44-777
Four-Lock Station Kit includes four 3/4 in. Padlocks with blue bumpers (44-900), 25 Heavy-Duty Lockout Tags (44-833) and three 1 in. Safety Lockout Hasps (44-800)	44-778
Ten-Lock Station (board only)	44-805
Ten-Lock Station Kit includes ten 3/4 in. Padlocks with blue bumpers (44-900), 25 Heavy-Duty Lockout Tags (44-833) and three 1 in. Safety Lockout Hasps (44-800)	44-806

## Lockout/Tagout Training Programs and Compliance Manuals

### Training Video – “Lockout/Tagout for Affected and Authorized Personnel,” updated January 2002 to meet the most recent training and regulatory requirements.

- 1 – Explains hazardous energy sources, lock requirements, tag requirements, and machinery auditing
- 2 – Explains requirements for a mandatory written program and training documentation

### Compliance Manual to assist your facility in complying with Federal Lockout/Tagout Regulations

- 1 – Reviews the OSHA Standard in understandable, everyday language
- 2 – Provides a step-by-step program to help you develop your “Lockout/Tagout” Compliance Program
- 3 – Outlines the type of information required for employee training

### The Real, Real Life Lockout/Tagout Training Video

- 1 – Information you and your employees need to assist you in complying with OSHA’s Lockout/Tagout Standards presented in an easy to understand and entertaining format
- 2 – This video comes in a plastic storage case and includes a leaders guide, training handbook with quiz, and wallet card reminder of the 6 steps to “Lock It and Tag It.”

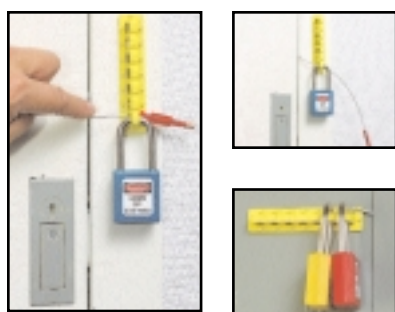


Description	Cat. No.
Lockout/Tagout for Authorized and Affected Personnel Video	44-942
Lockout/Tagout Compliance Manual	44-940
Electrical Safety Related Work Practices OSHA 1910.331 thru 1910.335 & 1910.339 (129 page manual)	44-963
Real, Real Life Lockout/Tagout Training Video	44-941
Real, Real Life Lockout/Tagout Handbooks, 10/pack	44-953

## Circuit Breaker Lockout Systems



### Without Integral Locks



- Use your own padlocks
- Recommend rail mounted on outside of panel to permit closure
- Panel door can close on 1/16", vinyl coated, galvanized cable (panel spacing gasket may be needed on panel doors w/tight clearances)

### Lockouts for Square D and other breakers with a lever through hole

Description	Cat. No.
Starter Kit Panel Lock System – Integral Locks Square D	<b>44-765</b>
<b>Kit 44-765 Includes:</b>	<b>Qty. Cat. No.</b>
4 in. Mounting Rail	1 <b>44-769</b>
Square D NQO locking cables with integral lock*	2 <b>44-766</b>

### Lockouts for Standard, Straight Lever Breakers

Description	Cat. No.
Starter Kit Panel Lock System – Integral Locks Standard	<b>44-761</b>
<b>Kit 44-761 Includes:</b>	<b>Qty. Cat. No.</b>
4 in. Mounting Rail	1 <b>44-769</b>
120/277V Locking Cables with Integral Lock*	2 <b>44-762</b>

Description:	Qty.	Cat. No.
High density, self-adhesive panel spacing gasket, 3/8 in. x 1 in. x 15 ft.	1	<b>44-750</b>

\*Components can be ordered separately by the catalog number listed. They are packaged in quantities of one.

**Comply with** the NEW "Disconnecting Means" standard for motor, motor circuits and controllers in **article 430.102B of the 2002 National Electric Code.**

- Adhesive backed rails allow system to be permanently installed in or just outside of an electrical panel, putting all lockout items at the point of need.
- Lockout systems allow the panel door to be shut during lockout applications.
- Optional Panel Spacing Gasket enables panel doors with tight clearances to be closed during lockout.
- Kits available for **standard 120-277 Volt Panels** and **SQ D NQO Series Panels**
- Locks single and multiple pole breakers.

### With Integral Locks



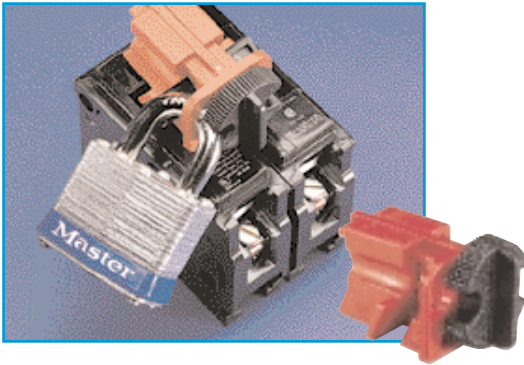
- Cables come with master lock base to fit cable key
- Locks are small enough to allow the panel door to be closed during lockout

Description	Cat. No.
Starter Kit Panel Lock System without Integral Locks Square D	<b>44-767</b>
<b>Kit 44-767 Includes:</b>	<b>Qty. Cat. No.</b>
4 in. Mounting Rail	1 <b>44-769</b>
Square D NQO locking cables without integral lock*	2 <b>44-768</b>

Description	Cat. No.
Starter Kit Panel Lock System without Integral Locks Standard	<b>44-763</b>
<b>Kit 44-763 Includes:</b>	<b>Qty. Cat. No.</b>
4 in. Mounting Rail	1 <b>44-769</b>
120/277V Locking Cables without Integral Lock*	2 <b>44-764</b>



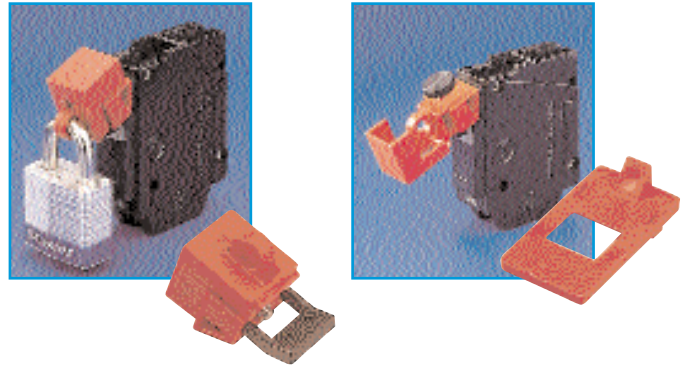
## Universal Multi-Pole Breaker Lockout



- Works with most major multi-pole breakers with tie-bar type switches including GE, ITE Sylvania, Challenger, Bryant, Westinghouse, Square D (2/3 poles) and General Switch Co.
- Easy to install – thumbscrew secures and locks tie bar in place; no cable ties or tools required
- Please see breaker guide for your application.

Description	Qty./Pkg.	Cat. No.
Universal Multi-Pole Breaker Lockout	1	44-783

## Single-Pole Breaker Lockout



- Unique screw clamp design works well with most single-pole breakers
- Snap on cleat accessory securely locks out long sliding switch throws with large angular rotation commonly found on some Westinghouse, ITE, Square D and Federal Pacific breakers
- Please see breaker guide for your application

Description	Qty./Card	Cat. No.
Universal Single-Pole Breaker Lockout	3	44-809
Cleat for Single-Pole Breaker Lockout	3	44-785

## Circuit Breaker Lockout Station

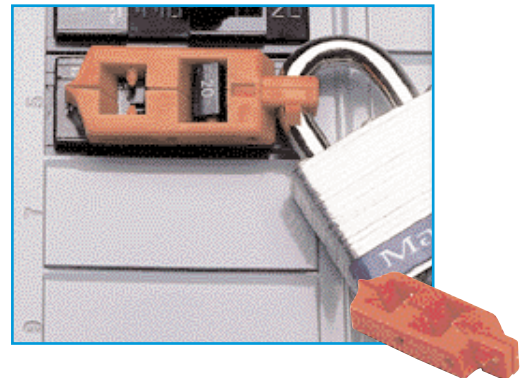
- Polystyrene board is designed to be mounted on or near electrical breaker boxes for instant, easy access



Description	Qty.	Cat. No.
Circuit Breaker Lockout/Tagout Station – 8" H x 6-1/4" W x 2-3/4" D		44-977
<b>Kit 44-977 Includes:</b>		
Hinged Single-Pole Breaker Lockout	2	44-810
Universal Single-Pole Breaker Lockout	2	44-809
Universal Multi-Pole Breaker Lockout	2	44-783
Lockout Tag – Do Not Operate	5	44-833
Red Safety Padlock	1	44-916
Circuit Breaker Lockout/Tagout only	1	IA-4992

Comply with article 430.102B of the 2002 National Electric Code.

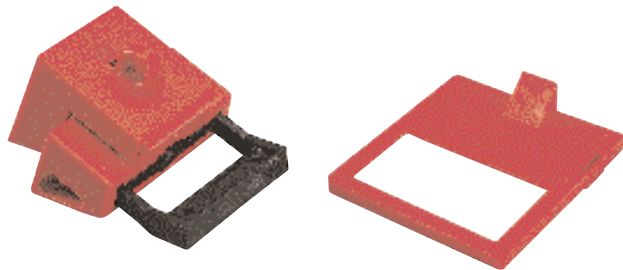
## Hinged Single-Pole Breaker Lockout



- Hinged single-pole lockout with locking post design, locks lever in off position to isolate and prevent breaker use
- Ideal for applications where panel closure is preferred
- Please see breaker guide for your application

Description	Qty./Card	Cat. No.
Hinged Single-Pole Breaker Lockout	3	44-810

## Single-Throw/Multi-Pole Breaker Lockout



- 480/600V lockout device designed primarily for Square D single-throw/multi-pole circuit breaker switches
- Snap-on cleat accessory securely locks out long sliding switch throws with large angular rotation commonly found on some Westinghouse, ITE, Square D and Federal Pacific breakers
- Please see breaker guide for your application

Description	Qty.	Cat. No.
Single-Throw/Multi-Pole Breaker Lockout	1	44-807
Cleat for Single-Throw/Multi-Pole Lockout	1	44-786

## Large Breaker Lockout



- Designed to lockout large 480/600V breaker switches up to 2-1/2 in. wide and 7/8 in. thick
- Easy to install – no tools required

Description	Qty.	Cat. No.
Large Breaker Lockout	1	44-823

## Oversized Circuit Breaker Lockout System



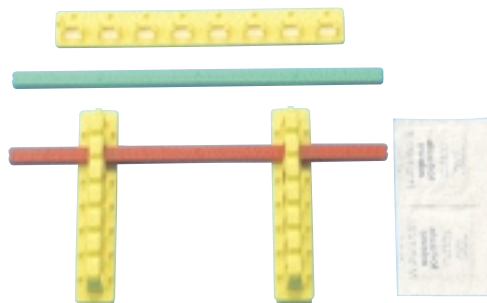
### To comply with:

“The provisions for locking or adding a lock to the disconnecting means shall be permanently installed on or at the switch or circuit breaker used as the disconnecting means.”

### Article 430.102(B) Motor 2002 NEC.

- Unique Lockout system for oversized 480/600V Circuit Breakers
- System can be permanently installed into an electrical panel putting all lockout items at the point of need
- Easy installation of adhesive mounting rails – no tools required
- Pegs in mounting rails mate with holes in locking arms for security of arm when lock is in place
- Red arms lock off, green arms lock on

Description	Qty.	Cat. No.
Oversized Circuit Breaker System – 480-600 Volt	1	44-822



# Wire Management

Manufacturer	Model	Breaker Number of Poles	IDEAL Lockout Device	Cleat Req'd	IDEAL Cleat No.
Bryant	BR	1	44-810	No	
	BR	2	44-809	No	
	BR	3	44-783	No	
Challenger	Type C	1	44-810	No	
	Type C	2	44-809	No	
Cutler Hammer	CH	1	44-810	No	
	CHB	1	44-810	No	
	CH	2, 3	44-783	No	
	CHB	2, 3	44-783	No	
Federal Electric Products	TYPE-NA	1	44-809		
Federal Pacific	TYPE-NB	2	44-783		
	TYPE-NB	3	44-807		
	TYPE-NA	3	44-807		
	TYPE-NASW	1	44-809		
	TYPE-NE	1	44-809		
	TYPE-NEF	3	44-809		
	TYPE-NEJ	3	44-809		
Frank Adams Electric Co.	TOGGLE	1	44-809		
	BG	1	44-809		
	BA	1	44-809		
General Electric	TE	2, 3	44-809	Yes	44-785
	TEB	1, 2, 3	44-809	Yes	44-785
	TED	1, 2, 3	44-809	Yes	44-785
	THED	1, 2, 3	44-809	Yes	44-785
	TEF	2, 3	44-809	Yes	44-785
	TEY	1, 2, 3	44-809	Yes	44-785
	TFJ	2, 3	44-807	No	
	TQL-A	1	44-810	No	
	TOB-A	1	44-810	No	
	TQC-A	1	44-810	No	
	THQL-A	1	44-810	No	
	THQB-A	1	44-810	No	
	THQC-A	1	44-810	No	
	THHQL-A	1	44-810	No	
	THHQB-A	1	44-810	No	
	THHQC-A	1	44-810	No	
	TQL	2, 3	44-783	No	
	TOB	2, 3	44-783	No	
	TOC	2, 3	44-783	No	
	THQL	2, 3	44-783	No	
	THOB	2, 3	44-783	No	
	THOC	2, 3	44-783	No	
	THHQI	2, 3	44-783	No	
	THHQB	2, 3	44-783	No	
	THHQc	2, 3	44-783	No	
	TQI-s	1	44-809	No	
	TQB-s	1	44-809	No	
TQc-s	1	44-809	No		
THQL-s	1	44-809	No		
THOB-s	1	44-809	No		
THQc-s	1	44-809	No		
THhQI-s	1	44-809	No		
THhQb-s	1	44-809	No		
THhQc-s	1	44-809	No		
TFJ	2, 3	44-807	No		
THFJ	2, 3	44-807	No		
TJD	3	44-807	Yes	44-786	
Heinemann Electric Co.	SMG4	1	44-809		
	AMIZ	1	44-809		
	KU	1	44-809		
	KL	1	44-809		
ITE	BOCH	1, 2, 3	44-809	No	
	EE	1, 2, 3	44-809	Yes	44-785
	EH	1, 2, 3	44-809	Yes	44-785
	ET	1, 2, 3	44-809	Yes	44-785
	ET-JJ	3	44-807	Yes	44-786
	FJ2-B	2, 3	44-807	Yes	44-786

Manufacturer	Model	Breaker Number of Poles	IDEAL Lockout Device	Cleat Req'd	IDEAL Cleat No.
ITE	QJ3B	2, 3	44-809	Yes	44-785
	QJ22B	2, 3	44-809	Yes	44-785
	QJ23B	2, 3	44-809	Yes	44-785
	QJH22B	2, 3	44-809	Yes	44-785
	QJH23B	2, 3	44-809	Yes	44-785
	QJ2-H	2, 3	44-809	Yes	44-785
	OP	1	44-810	No	
	OPH	1	44-810	No	
	HQP	1	44-810	No	
BQ	1	44-810	No		
BOH	1	44-810	No		
HBQ	1	44-810	No		
Square D	LA	2, 3	44-807	Yes	44-786
	LAL	2, 3	44-807	Yes	44-786
	MA	2, 3	44-807	Yes	44-786
	MH	2, 3	44-807	Yes	44-786
	ML-1	3	44-807	Yes	44-786
	QO	1	44-810	No	
	QOB	1	44-810	No	
	QO	2, 3	44-809	No	
	QOB	2, 3	44-809	No	
	Q2L	2, 3	44-809	Yes	44-785
Q2MT	2, 3	44-809	Yes	44-785	
Q1B	2, 3	44-809	No		
Sylvania & Challenger	TYPE-C	1	44-809		
	TYPE-C	3	44-783		
Westinghouse	BA	1	44-810	No	
	BAB	1	44-810	No	
	QBHW	1	44-810	No	
	HBAX	1	44-810	No	
	HBAW	1	44-810	No	
	BR	1	44-810	No	
	BR	2, 3	44-783	No	
	BRH	2, 3	44-783	No	
	EB	1, 2, 3	44-809	Yes	44-785
	EHB	1, 2, 3	44-809	Yes	44-785
	FB	2, 3	44-809	Yes	44-785
	EH	1, 2, 3	44-809	Yes	44-785
	FA	3	44-809	Yes	44-785
	MCPO	3	44-809	Yes	44-785
	EHD	1, 2, 3	44-809	No	
	FDB	2, 3, 4	44-809	No	
	FD	1, 2, 3, 4	44-809	No	
	HFD	1, 2, 3, 4	44-809	No	
	FDC	2, 3, 4	44-809	No	
	GB	1, 2, 3	44-809	No	
	GBH	1, 2, 3	44-809	No	
	GR	3	44-807	No	
	HQP	1	44-810	No	
	QPHW	1	44-810	No	
	QHPX	1	44-810	No	
	QHPW	1	44-810	No	
HONP	3	44-809	No		
KA	3	44-807	Yes	44-786	
LA	3	44-807	Yes	44-786	
MA	2, 3	44-807	Yes	44-786	
MC	2, 3	44-807	Yes	44-786	
MCC	2, 3	44-807	Yes	44-786	
QC	1	44-810	No		
OCHW	1	44-810	No		
QHCX	1	44-810	No		
QHCW	1	44-810	No		
Zinsco Electric Products	Q & QB	1	44-809	No	

Lockout/Tagout

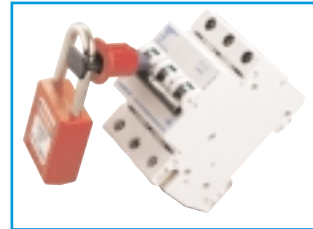
## Miniature Circuit Breaker Lockouts for European-Style Breakers

- Easy to install push button action – requires no tools
- Lightweight Xenoy locks are required
- See user guide below for the style that fits your application

**Pins Out – #44-779**



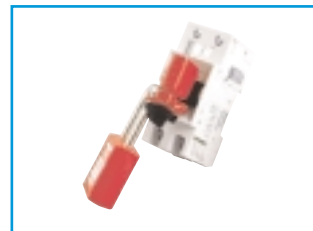
**Pins In – #44-780**



**Pins Out Wide – #44-784**



**Tie Bar – #44-787**

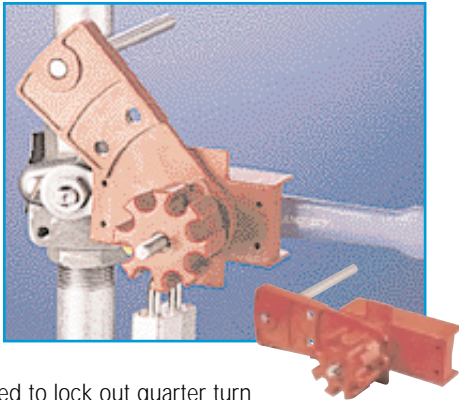


Manufacturer	Model	Breaker Number of Poles	IDEAL Lockout Device
ABB	F374	1	<b>44-779</b>
	S222	1	<b>44-779</b>
	S251, S261, S263	1	<b>44-779</b>
	S272, S253	1	<b>44-779</b>
	S253	3	<b>44-779</b>
AEG	E82S	2	<b>44-780</b>
Allen-Bradley	1492-C1, 2, 3	1, 2, 3	<b>44-779</b>
Buschmat	S46	1	<b>44-779</b>
Clipsal	4CB116	1	<b>44-779</b>
	4CB320	3	<b>44-779</b>
E-T-A	911225	1	<b>44-780</b>
	911220G	2	<b>44-779</b>
FAZ	C16	1	<b>44-779</b>
	C16	4	<b>44-779</b>
GE Vynckier	Series G	1	<b>44-780</b>
	Series E	3	<b>44-780</b>
	Series G	3	<b>44-780</b>
	Series E	4	<b>44-780</b>
GE Vynckier 16A	Series E	2	<b>44-780</b>
GE Vynckier C16, 16A	Series E	1	<b>44-780</b>
Hager	MW216A	2	<b>44-779</b>
	453717	3	<b>44-779</b>
	MW620A	4	<b>44-779</b>
Kapp	LS68	1	<b>44-780</b>
Legrand	01908	1	<b>44-779</b>
	01935	2	<b>44-787</b>
	04302	2	<b>44-780</b>
	01980	3	<b>44-787</b>

Manufacturer	Model	Breaker Number of Poles	IDEAL Lockout Device
Legrand	06469	3	<b>44-780</b>
	01980	4	<b>44-787</b>
Lemag	SD62	1	<b>44-809</b>
Merlin Gerin	C32N	1	<b>44-779</b>
	C60N	1	<b>44-779</b>
	C60N	2	<b>44-779</b>
	C32N	3	<b>44-779</b>
	C45AD	3	<b>44-779</b>
	C80A	3	<b>44-784 or 44-787</b>
	C60N	4	<b>44-779</b>
Merlin Gerin +B83	B100A	2	<b>44-784 or 44-787</b>
Proteus	C16	1	<b>44-779</b>
	C6	1	<b>44-779</b>
	BSEN60947-3	2	<b>44-783</b>
	C6	3	<b>44-779</b>
	AC22 BS5419	2	<b>44-783</b>
Siemens 17U	5SQ11	1	<b>44-784</b>
	5SQ12	2	<b>44-787</b>
	5SQ13	3	<b>44-787</b>
	5SQ16	4	<b>44-787</b>
Siemens B32	5SX21	1	<b>44-784</b>
Siemens BIG Single Throw	3VF3	3	<b>44-809</b>
Siemens C10	5SX1	1	<b>44-784</b>
Siemens C32	5SX1-2	2	<b>44-787</b>
Siemens C70	5SX13	3	<b>44-787</b>
Siemens L20A	5SN2-2	2	<b>44-787</b>
Sursum	EA53	3	<b>44-780</b>
Wylex	WRS40/2	2	<b>44-779</b>



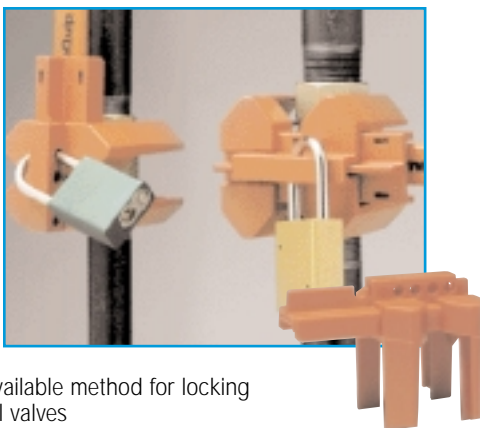
## Universal Ball Valve Lockout



- Designed to lock out quarter turn valves of varying sizes and geometries
- Accommodates handle sizes to 1-1/14 in. thick x 1-5/8 in. wide
- Locks valves in on, off or throttled position
- Nylon and stainless steel construction
- Additional arms necessary to lock in throttled position and to lock out 3-, 4- and 5-way valves

Description	Cat. No.
Small Universal Ball Valve Lockout w/ 1 in. x 3/4 in. handle	<b>44-770</b>
Large Universal Ball Valve Lockout w/ 1-5/8 in. x 1-1/4 in. handle	<b>44-771</b>

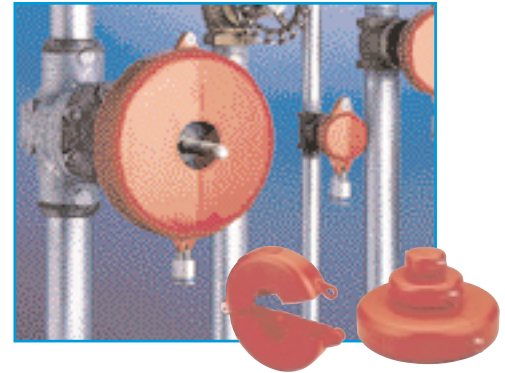
## Ball Valve Lockout Devices



- Best available method for locking out ball valves
- Patented design fits most major brand ball valves
- Designed to lock in off position only
- Complies with OSHA lockout standard

Valve Size (In.)	Max. Shackle Length	Material	Cat. No.
1/2 to 1-1/4	—	Polypropylene	<b>44-846</b>
1-1/4 to 3	—	Polypropylene	<b>44-847</b>
1/4 to 1 (not shown)	9/32	Nylon	<b>44-820</b>
1-1/4 to 3 (not shown)	9/32	Heavy steel	<b>44-821</b>

## Gate Valve Lockouts



- Durable plastic resists chemicals and extreme temperatures to 240°F
- Stainless steel hinge for added strength and security
- Unique knockout feature accommodates OS&Y or rising stem gate valves
- Accepts locks with up to 3/8 in.

Valve Size	Qty./Pkg.	Cat. No.
1 in. to 2-1/2 in.	1	<b>44-824</b>
2-1/2 in. to 5 in.	1	<b>44-825</b>
5 in. to 6-1/2 in.	1	<b>44-826</b>
6-1/2 in. to 10 in.	1	<b>44-827</b>
10 in. to 13 in.	1	<b>44-828</b>

## Pneumatic Lockout



- Isolates equipment from compressed air
- Fits C, D and E couplers
- Accommodates most 1/4 in., 3/8 in. and 1/2 in. fittings
- Accepts 1/4 in. or 9/32 in. padlock shackles
- Durable plastic construction

Description	Cat. No.
Pneumatic Lockout	<b>44-774</b>



## Cable Lockout System

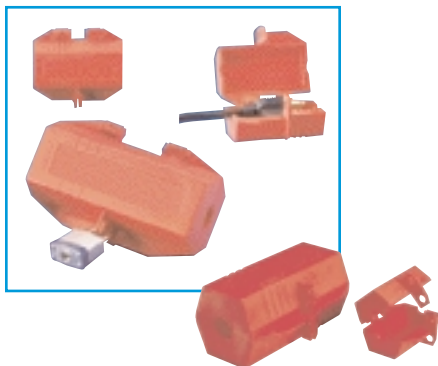


- Heavy-duty plastic lockout unit firmly secures cable

Description	Cat. No.
Cable Lockout System (not shown)	44-781
Cable Lockout	44-829

## Plug Lockouts

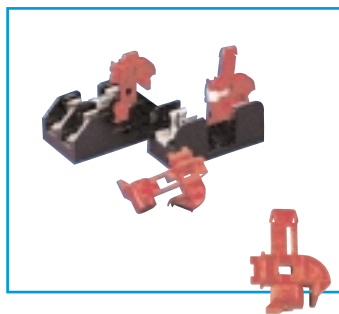
- Accommodate a variety of electrical plug and cord sizes to prevent accidental connection or disconnection
- Durable plastic body resists wear, chemicals and job-site abuse
- Accommodates cable ties or padlocks (with up to 3/8 in. shackles)



Description	Size	Cat. No.
Plug Lockouts – 110V	2 in. x 2 in. x 3-1/2 in.	44-818
Plug Lockouts – 220/550V	3-1/4 in. x 3-1/4 in. x 7 in.	44-819

## Fuse Lockout Devices

- Fuse lockout snaps easily into place and can be cable tied for added security
- Fit most Buss and Gould fuse blocks



Description	Qty./Card	Cat. No.
13/32 in. Fuse Lockout	3	44-813

## Wall Switch Lockout

- Fits standard wall-mounted single or three-way electrical switches
- Locks switch in either on or off position
- Installs quickly using existing plate screws



Description	Qty./Card	Cat. No.
Wall Switch Lockout	1	44-789

## Electric Plug Lockout

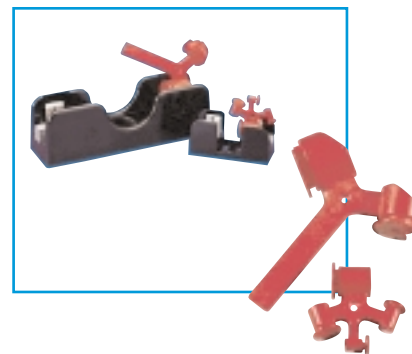
- Slides over cord prongs and locks in place to prevent cord from being plugged into an outlet
- Cannot be removed without key
- Works on any 2- or 3-prong plug



Description	Cat. No.
Electric Plug Lockout	44-782
Electric Plug Lockout (keyed alike – key 8002)	44-8002

## Fuse Blockout Devices

- Highly visible fuse blockouts snap into blade-type fuse blocks to prevent installation of fuses
- Fit most Buss and Gould fuse blocks



Description	Qty./Card	Cat. No.
1/4, 9/32 and 9/16 in. Fuse Blockout	3	44-815
13/16 in., 1-1/16 in. and Blade Fuse Blockout	3	44-816

## Aluminum Safety Lockout Padlocks

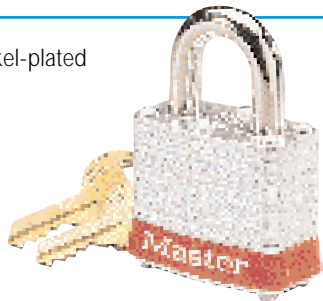


- High visibility, baked-on powder coated finish stays bright
- Ideal for corrosive and tough environments
- Rekeyable bodies for easy key system maintenance
- Hardened shackles for superior resistance to cutting

Bumper Color	Cat. No.
Blue	44-920
Black	44-921
Red	44-922
Yellow	44-923

## Steel Padlocks

- Rustproofed, steel case with nickel-plated shackle withstands abuse and environmental hazards
- Includes two keys
- 1-1/2 in. wide lock with 9/32 in. shackle diameter
- Keyed-alike and Master-Keyed locks available by special order



Bumper Color	3/4 In. Shackle Clearance	2 In. Shackle Clearance
	Cat. No.	Cat. No.
Blue	44-900	44-901
Black	44-902	44-903
White	44-904	44-905
Red	44-906	44-907
Green	44-908	44-909
Yellow	44-910	44-911

## Xenoy Safety Lockout Padlocks



- Dedicated safety lockout device reduces confusion with other locks
- Non-conductive, lightweight Xenoy® body
- 1-1/2 in. shackle clearance
- 1-1/2 in. wide lock with 1/4 in. shackle
- Four colors for easy identification
- Keyed alike and Master-Keyed locks available by special order

Bumper Color	Cat. No.
Blue	44-912
Black	44-914
Red	44-916
Yellow	44-918

## Lock Labels



- Easy identification of employees' locks
- Write-on, vinyl labels with peel-off adhesive backing
- Polyester over laminate protects label

Description	Cat. No.
Lock Labels	44-898

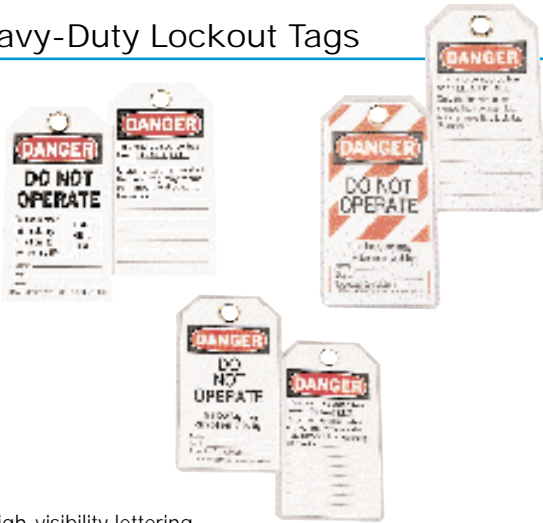
## Marking Pens

- Fast-drying, permanent ink will not smear
- Use on write-on marker cards and write-on cable-tie marker plates
- Color-coded in red or black



Description	Cat. No.
Marking Pen w/black ink	41-697
Marking Pen w/red ink	41-698

## Heavy-Duty Lockout Tags

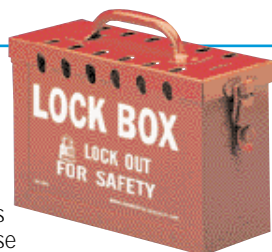


- High-visibility lettering
- Laminated plastic tags have non-fade legends, resist corrosive and harsh environmental conditions and a 7/8 in. grommet
- Vinyl tags are silk screened with a metal grommet; red tie fastener included
- Exceeds OSHA's 50-lb. pullout requirement

Legend	Type	Qty.	Cat.No.
Do Not Operate	Heavy-Duty Laminated	Card of 5	<b>44-830</b>
Do Not Operate	Heavy-Duty Laminated	Box of 100	<b>44-1830</b>
Do Not Operate	Economy Vinyl	Bag of 25	<b>44-848</b>
Do Not Operate – Maintenance Department	Heavy-Duty Laminated	Card of 5	<b>44-831</b>
Do Not Operate – Maintenance Department	Economy Vinyl	Bag of 25	<b>44-844</b>
Do Not Operate – Electricians at Work	Heavy-Duty Laminated	Card of 5	<b>44-832</b>
Do Not Operate – Electricians at Work	Economy Vinyl	Bag of 25	<b>44-843</b>
Do Not Operate – (red striped background)	Heavy-Duty Laminated	Card of 5	<b>44-833</b>
Do Not Operate – (red striped background)	Heavy-Duty Laminated	Box of 100	<b>44-1833</b>
Do Not Operate (red striped background)	Economy Vinyl	Bag of 25	<b>44-849</b>
Do Not Operate – Lockout Steps Required	Heavy-Duty Laminated	Card of 5	<b>44-835</b>
Do Not Operate (Photo ID - Self Sealant)	Heavy-Duty Laminated	Card of 5	<b>44-834</b>

## Group Lock Box

- Helps ensure maximum security for complex work team situations
- Allows up to 13 individuals to personally lock the closed box
- Heavy-duty steel construction resists unauthorized entry and job-site abuse
- Compact 8-3/4 in. x 3-1/2 in. x 6 in. design



Description	Cat. No.
Group Lock Box	<b>44-804</b>

## Bilingual Lockouts and Tags



- Spanish/English tags provide extra safety and information in bilingual situations
- High-visibility lettering
- Laminated plastic tags with non-fade legends resist corrosive and harsh environmental conditions
- Write-on tag with 7/8 in. grommet can be padlocked to device to help prevent unauthorized removal

Legend	Qty./Card	Cat. No.
Do Not Operate	5	<b>44-840</b>
Do Not Operate (striped)	5	<b>44-841</b>

## Safety Lockout Hasps



- Allow up to six workers to lock out a single energy source
- Rustproofed, plated and vinyl-coated
- Labeled hasps feature anodized aluminum alloy construction for long-term durability
- Permanent "Do Not Operate" labels accept pens, pencils and permanent markers

### Safety Lockout Hasps

Jaw Diameter	Qty./Card	Cat. No.
1 in.	3	<b>44-800</b>
1-1/2 in.	2	<b>44-801</b>

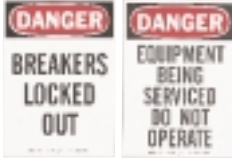
### Labeled Safety Lockout Hasps

Legend	Color	Qty./Card	Cat. No.
Do Not Operate	Blue	1	<b>44-790</b>
Do Not Operate	Red	1	<b>44-791</b>

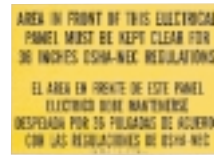
## Lockout Signs

- Resistant to both chemicals and abrasion – protected graphics for indoor and outdoor use

### Magnetic Danger Signs



### OSHA Regulation Signs



Legend	Material	Size (In.)	Cat. No.
Danger Breakers Locked Out –	Magnetic	5 x 7	44-890
Danger Equipment Being Serviced Do Not Operate	Magnetic	5 x 7	44-891
Lock Out Before Servicing	Self-sticking polyester	2-1/4 x 4-1/2	44-884
Notice in Accordance with OSHA	Fiberglass	20 x 14	44-887

Legend	Material	Size (In.)	Cat. No.
OSHA Regulation	Self-sticking polyester	3-1/2 x 10	44-877
OSHA Regulation – Bilingual	Self-sticking polyester	7 x 10	44-878
Lockout Safety Center	Acrylic	6H x 9W x 4D	44-885

## Safety Signs

- Resistant to both chemicals & abrasion – protected graphics for indoor & outdoor use



Legend	Material	Size (In.)	Cat. No.
<b>Electrical and Other Danger Signs</b>			
Danger – High Voltage	Fiberglass	10 x 14	44-862
Danger – High Voltage	Self-Sticking Polyester	7 x 10	44-863
Danger – High Voltage – Keep Out	Fiberglass	10 x 14	44-880
Danger – High Voltage – Keep Out	Self-Sticking Polyester	7 x 10	44-881
Danger – _____ Volts	Fiberglass	10 x 14	44-860
Danger – _____ Volts	Self-Sticking Polyester	7 x 10	44-861
Danger – Electrical Equipment – Authorized Personnel Only	Fiberglass	10 x 14	44-868
Danger – Electrical Equipment – Authorized Personnel Only	Self-Sticking Polyester	7 x 10	44-869
Danger – Electrical Hazard – Authorized Personnel Only	Fiberglass	10 x 14	44-872
Danger – Electrical Hazard – Authorized Personnel Only	Self-Sticking Polyester	7 x 10	44-873
Keep Out	Fiberglass	10 x 14	44-888
Keep Out	Self-Sticking Polyester	7 x 10	44-889
Do Not Enter	Fiberglass	10 x 14	44-876
Do Not Enter	Self-Sticking Polyester	7 x 10	44-879
Danger High Voltage – Spanish	Self-Sticking Polyester	7 x 10	44-865
Danger High Voltage – Bilingual	Fiberglass	20 x 14	44-882

Legend	Material	Size (In.)	Qty./Pkg.	Cat. No.
<b>PPE Caution Labels and Signs</b>				
Hearing Protection Required	Fiberglass	10 x 14	1	44-852
Hearing Protection Required	Self-Sticking Polyester	7 x 10	1	44-853
Hard Hats Required	Fiberglass	10 x 14	1	44-856
Hard Hats Required	Self-Sticking Polyester	7 x 10	1	44-857
Eye Protection Required	Fiberglass	10 x 14	1	44-850
Eye Protection Required	Self-Sticking Polyester	7 x 10	1	44-851



## Python™ Adjustable Locking Cable

Python™ Adjustable Locking Cable secures anything within its grasp. It's the only locking cable that is always the right length for your application. This exclusive, patented product holds the flexible steel cable tight at any position for infinite possibilities.



- Infinite Locking Positions – The patented lock holds the cable tight at any position from 1 ft. (30cm) to 6 ft. (1.8m)
- Application Flexibility – Interchangeable cables
- Keyed Alike Convenience – Rekeyable cylinder
- Cut Resistance – 3/8 in. (10mm), 100% steel braided cable
- Weather Tough – Rust resistant aluminum lock body
- Scratch Resistant – Vinyl cable sleeve and lock body bumper

Other Applications: Bikes, lawn furniture, lawn mowers, job sites, canoes, boats, skis, snowboards, generators, pickup truck cargo, spare tire locks and much more.



Description	Cat. No.
Master Lock Python Kit with 6 ft. Cable-keyed different	44-990
Master Lock Python Kit with 6 ft. Cable-keyed alike	44-991
12 ft. (3.7m) x 3/8 in. (10mm) Cable for Python Lock	44-992

## Pro-Series® Shackless Lock and Hasp

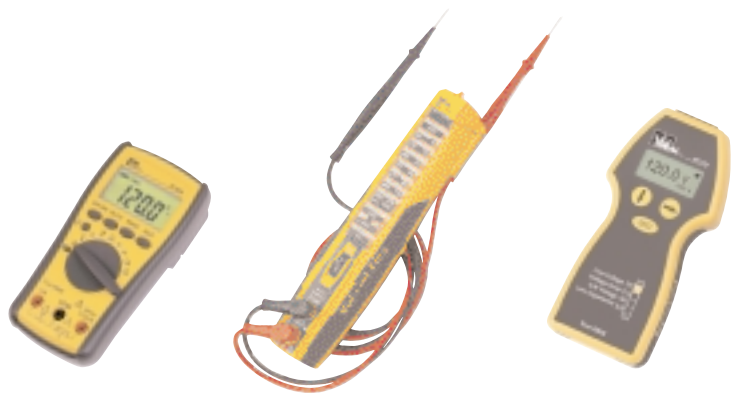
- Ideal for vans, trucks, gates and vending
- Defeats attempts to pry and cut
- Hardened solid steel lock body withstands forcible attacks
- Complete with high security 6-pin Pro Series® Cylinder



Description	Cat. No.
Hidden Shackle Solid Steel Padlock	44-994
Solid Steel Hasp for use with 44-994	44-993









## Multimeter Selection Guide

Selection Guide

MULTIMETER SELECTION GUIDE	320 Series			360 Series		480 Series		490 Series		600 Series				610		630 Series	
	61-320	61-322	61-324	61-360	61-361	61-481	61-482	61-494	61-495	61-601	61-602	61-603	61-609	61-610	61-614	61-633	61-635
<b>MEASUREMENT FUNCTIONS</b>																	
AC & DC Voltage	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AC Current		•	•	•	•	•	•	•	•				•			•	•
DC Current	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•
Resistance	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
LV Resistance								•	•							•	•
Audible Continuity	•	•	•	•	•	•	•	•	•				•	•	•	•	•
Diode Test	•	•	•	•	•	•	•	•	•	•	•	•				•	•
Capacitance	•	•	•		•	•	•	•	•							•	•
Frequency	•	•	•		•	•	•	•	•							•	•
Temperature							•	•	•								•
Duty Factor								•	•							•	•
Battery Test												•		•			
Decibels								•	•					•	•		
Phase Rotation					•												
<b>FEATURES</b>																	
Display Type (Digital or Analog)	D	D	D	D	D	D	D	D	D	D	D	D	D	A	A	D	D
True RMS		•	•		•	•	•	•	•							•	•
Auto/Manual Ranging	•	•	•			•	•	•	•	•		•				•	•
Data Hold/Auto Hold	D	D	D	D		A	A	A	A	D		D		D		A	A
Max Hold				•													
Peak Hold								•	•							•	•
Min/Max	•	•	•			•	•					•				•	•
Min/Max/Avg								•	•								
Peak Min/Max							•										
Relative Mode							•	•	•							•	•
High/Low Limits																•	•
High Speed Analog Bar Graph						•	•	•	•	•						•	•
Auto Power Off	•	•	•	•	•	•	•	•	•	•		•				•	•
Backlight			•				•	•	•							•	•
Low Battery Indication	•	•	•	•	•	•	•	•	•	•		•				•	•
Dual Display								•	•								
Triple Display																•	•
Overload Protection on All Ranges	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•
Data Logging								•	•								
Data Acquisition			•					•	•							•	•
Memory Storage & Recall								•	•							•	•
Optical RS-232 Interface			•					•	•							•	•
Optional ProVision™ Software*			•					•	*							•	*
Warranty (yrs)**	L	L	L	L	L	L	L	L	L	L	L	L	L	5	5	L	L
<b>CERTIFICATIONS</b>																	
UL 3111-1 Listed	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
cUL or CSA	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
CAT III Rating	•	•	•	•	•	•	•	•	•					•	•	•	•
CE	•	•	•	•	•	•	•	•	•				•	•	•	•	•

\*Software and Optical RS-232 Interface come standard with this model

\*\* L = Lifetime Limited Warranty

## PlatinumPro®

### Contractor-Grade Multimeters

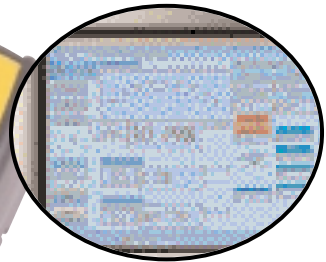
#### Features

- Capacitance
- Frequency
- Auto/manual ranging
- Min/max
- Data hold
- Auto power off



61-324

True RMS, backlight data acquisition and RS-232 interface



Data acquisition and analysis with 320 ProVision™ software for 324. See page E-35 for information.

61-322

True RMS

61-320

#### Accessories

Includes	
Premium Test Leads w/Alligator Clips	TL-100
Optional	
Carrying Case	C-290
Current Clamp Adapter	61-334
ProVision™ Software	61-904
RS-232 Cable	61-905

320 Series Specifications		61-320	61-322	61-324
	RANGE & RESOLUTION	BASIC ACCURACY		
AC VOLTAGE	600.0m/6.000/60.00/600.0/750 V	0.9%	0.9%	0.9%
DC VOLTAGE	600.0m/6.000/60.00/600.0/1000 V	0.5%	0.5%	0.5%
AC CURRENT	60.00m/600.0m A	—	1.5%	1.5%
DC CURRENT	600.0μ/6000μ/60.00m/600.0m A	1.0% (μA range only)	1.0%	1.0%
RESISTANCE	600.0/6.000k/60.00k/600.0k 6.000M/60.00M Ω	0.7%	0.7%	0.7%
CAPACITANCE	60.00μ/600.0μ/6.000m F	1.9%	1.9%	1.9%
FREQUENCY	6000/60.00k/600.0k/6.000M/60.00M Hz	0.01%	0.01%	0.01%



# PlatinumPro®

## Commercial-Grade Multimeters

### Features



- True RMS
- Capacitance
- Frequency
- Auto/manual ranging
- Analog bar graph
- Data hold
- Auto power off
- Low battery indication
- Accessories



61-482

Temperature, min/max, peak min/max, relative mode, backlight, includes thermocouple



61-481

### Accessories

Includes	
Carrying Case	C-290
Premium Test Leads with Alligator Clips	TL-100
Optional	
Current Clamp Adapter	61-334

480 Series Specifications	RANGE & RESOLUTION	BASIC ACCURACY	
		61-481	61-482
AC VOLTAGE	400.0m/4.000/40.00/400.0/750 V	1.3%	1.3%
DC VOLTAGE	400.0m/4.000/40.00/400.0/1000 V	0.25%	0.25%
AC CURRENT	40.00m/400.0m/10 A	2.0%	2.0%
DC CURRENT	40.00m/400.0m/10 A	0.6%	0.6%
RESISTANCE	400.0/4.000k/40.00k/400.0k./4.000M/40.00M Ω	0.4%	0.4%
CAPACITANCE	4.000n/40.00n/400.0n/4.000µ/40.00µ/ 400.0µ/4.000m/40.00m F	2.0%	2.0%
FREQUENCY	4.000k/40.00k/400.0k/4.000M/40.00M Hz	0.01%	0.01%
TEMPERATURE	-4° F to 1472° F (-20°C to 800°C)	---	2.0%



## PlatinumPro®

### Industrial-Grade Multimeters

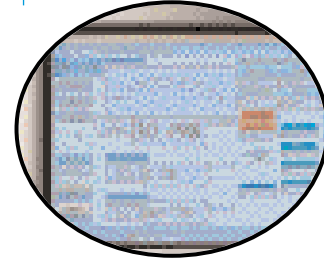
#### Features

- True RMS
- Data acquisition
- Data logging
- Data storage
- Frequency
- Capacitance
- Temperature
- Lo voltage  $\Omega$
- Duty factor
- dBm/dB
- Auto/manual ranging
- Dual display
- Analog bar graph
- Auto power off
- Peak hold
- Min/max/avg
- Relative mode
- 20,000 count high accuracy mode
- Backlight
- Low battery indication



61-495

**Data logging (40,000 records), thermocouple, software and cable interface included**



*Data acquisition and analysis with 490 ProVision™ software. See page E-35 for information.*



61-494

**Data logging (6,000 records)**

#### Accessories

Includes	
Carrying Case	C-290
Premium Test Leads with Alligator Clips	TL-100
Optional	
Current Clamp Adapter	61-333
ProVision™ Software*	61-900
RS-232 Cable*	61-902

\*Included with 61-495

490 Series Specifications	61-494	61-495
	<b>RANGE &amp; RESOLUTION</b>	<b>BASIC ACCURACY</b>
AC VOLTAGE	20.000m/200.00m/2.000k/20.00k/200.0k/750.0 V	0.7%      0.7%
DC VOLTAGE	20.000m/200.00m/2.000k/20.00k/200.0k/1000.0 V	0.06%      0.06%
AC CURRENT	20.000m/200.00m/2.000k/10.00k A	0.1%      0.1%
DC CURRENT	20.000m/200.00m/2.000k/10.00k A	0.3%      0.2%
RESISTANCE	200.0k/2.000k/20.00k/200.0k/2.000M/20.00k/200.0k/2.000G $\Omega$	0.6%      0.6%
LV RESISTANCE	2.000k/20.00k/200.0k/2.000M/20.00k/200.0k $\Omega$	0.3%      0.3%
CAPACITANCE	4.000n/40.00n/400.0n/4.000 $\mu$ /40.00 $\mu$ /400.0 $\mu$ /4.000m/40.00mF	0.9%      0.9%
FREQUENCY	20.00k/200.0k/2.000k/20.00k/200.0k/1.000M Hz	0.01%      0.01%
DUTY FACTOR	20% - 80%	1.0%      1.0%
TEMPERATURE	-150° F to 2200° F (-100° C TO 1200° C)	0.1%      0.1%





# PlatinumPro®

## Technical-Grade Multimeters

### Features



- Data acquisition
- Optical RS-232 interface
- True RMS
- Auto/manual ranging
- Analog bar graph
- Peak hold (0.5ms)
- Capacitance
- Frequency
- Duty factor
- Auto calibration
- Auto hold/peak hold
- Memory store and recall
- Lead input warning
- High/low limits
- Max/min/max-min
- Relative mode
- Backlight
- Auto power off
- Triple display
- Low battery indication

61-635

Extended accuracies, software and interface cable included, temperature, thermocouple included



Data acquisition and analysis with 630 ProVision™ software. See page E-35 for information.

61-633



### Accessories

Includes	
Carrying Case	C-290
Premium Test Leads with Alligator Clips	TL-100
Optional	
Current Clamp Adapter	61-333
ProVision™ Software*	61-901
RS-232 Cable*	61-902

\*Included with 61-635

630 Series Specifications		61-633	61-635
	<b>RANGE &amp; RESOLUTION</b>	<b>BASIC ACCURACY</b>	
AC VOLTAGE	400.00m/4.0000/40.000/400.00/750.0 V	1.0%	0.7%
DC VOLTAGE	40.000m/400.00m/4.0000/40.000/400.00/1000.0 V	0.02%	0.06%
AC CURRENT	40.000m/400.00m/4.0000/10.000 A	1.2%	0.8%
DC CURRENT	40.000m/400.00m/4.0000/10.000 A	0.5%	0.2%
RESISTANCE	400.00/4.0000k/40.000k/400.00k/ 4.0000M/40.000M Ω	0.5%	0.3%
LV RESISTANCE	4.0000k/40.000k/400.00k/ 4.0000M/40.000M Ω	1.0%	0.6%
CAPACITANCE	4.0000n/40.000n/400.00n/4.0000μ/ 40.000μ/400.00μ/4.0000m/40.000m F	1.9%	0.9%
FREQUENCY	400.00/4.0000k/40.000k/400.00k/4.0000M Hz	0.01%	0.01%
DUTY FACTOR	20% - 80%	1.0%	1.0%
TEMPERATURE	-150° F to 2200° F (-100° C TO 1200° C)	—	2.0%



## Test-Pro® Contractor-Grade Multimeters

### Features



- Auto power off
- Low battery indication



61-361

True RMS,  
phase rotation,  
capacitance,  
frequency



61-360

Max hold,  
data hold

### Accessories

Includes	
Standard Test Leads	TL-58
Optional	
Carrying Case	C-290
Current Clamp Adapter	61-334

360 Series Specifications		61-360	61-361
	RANGE & RESOLUTION	BASIC ACCURACY	
AC VOLTAGE	200.0m/2000m/20.00/200.0/600 V	1.0%	2.0%
DC VOLTAGE	200.0m/2000m/20.00/200.0/600 V	0.5%	1.2%
AC CURRENT	2.000 A	1.5%	3.0%
DC CURRENT	2.000 A	1.0%	2.5%
RESISTANCE	200.0/2.000k/20.00k/200.0k/20.00M/200.0M Ω	1.0%	1.0%
CAPACITANCE	20.00μ/200.0μ/2.000m/20.00m F	—	4.0%
FREQUENCY	10.0-100.0k Hz	—	0.50%
PHASE ROTATION		—	80-500V (50-500HZ)



## 600 Series Pocket Meters

### Features



- Low cost, multi-function
- Convenient pocket size
- Overload protection on all ranges



61-602



61-601  
(Booklet Style Case)

Built-in test leads, audible continuity, auto power off, low battery indication



61-603  
(Built-in test stand)

Battery test, low battery indication



61-609  
(Built-in test stand)

Auto/manual ranging, auto power off

600 Series Specifications		61-601		61-602		61-603		61-609	
	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY	
AC VOLTAGE	3.200/32.00/ 320.0/450 V	4.0%	200.0/600 V	2.5%	200.0/500 V	1.0%	400.0m/4.000/40.00/ 400.0/750 V	1.3%	
DC VOLTAGE	320.0m/3.200/ 32.00/320.0/450 V	2.0%	200.0m/2.000/ 20.00/200.0/600 V	2.0%	2.000/20.00/ 200.0/1000 V	0.5%	400.0m/4.000/40.00/ 400.0/1000 V	1.0%	
AC CURRENT	—	—	—	—	—	—	40.00m/400.0m/10 A	1.5%	
DC CURRENT	—	—	2.000m/20.00m/ 200.0m A	1.0%	2.000m/20.00m/ 200.0m/10.00 A	1.0%	40.00m/400.0m/10 A	1.0%	
RESISTANCE	320.0/3.200k/320.0k/ 3.200M/32.00M Ω	2.0%	200.0/2.000k/20.00k/ 200.0k/2.000M/20.00M Ω	1.5%	200.0/2.000k/20.00k/ 200.0k/2.000M Ω	0.8%	400.0/4.000/40.00/400.0k/ 4.000/40.00M Ω	0.8%	
BATTERY TEST	—	—	—	—	1.5V, 9.0VDC	—	—	—	



## Analog Multimeters

### Features

- Multi-color analog display with mirrored scale
- High-impact thermoplastic case
- Decibel measurement
- 5-year warranty

61-614  
Audible continuity,  
battery test,  
built-in stand



61-610  
Pocket size,  
diode protected

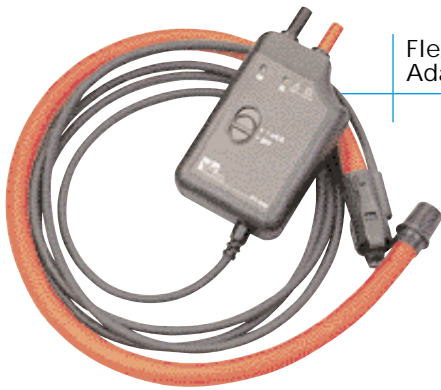


610 Series Specifications		61-610		61-614	
	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY	
AC VOLTAGE	10/50/250/500 V	+/- 4.0% Full Scale	10/50/250/1000 V	+/- 4.0% Full Scale	
DC VOLTAGE	10/50/250/500 V	+/- 3.0% Full Scale	2.5/10/50/250/1000 V	+/- 3.0% Full Scale	
DC CURRENT	500 $\mu$ /50m/250m A	+/- 3.0% Full Scale	5m/50m/500m/20 A	+/- 3.0% Full Scale	
RESISTANCE	1 M $\Omega$ Full Scale 5 k $\Omega$ Mid Scale	+/- 3.0% Arc Length	10k/100k/10M $\Omega$ Full Scale 50/500/50k $\Omega$ Mid Scale	+/- 3.0% Arc Length	
DECIBELS	-20 to +56 dB		-8 to +62 dB		
BATTERY TEST	—		1.5, 9.0 VDC		





## Current Clamp Adapters



Flexible Clamp Adapter



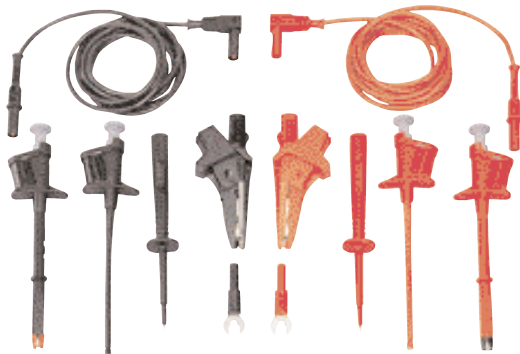
Current Clamp Adapter

Current Clamp Adapters	Cat. No.
200AAC Current Clamp Adapter	61-332
300AAC Current Clamp Adapter	61-451
500AAC Current Clamp Adapter	61-333
600A AC/DC Current Clamp Adapter	61-334
1000AAC Current Clamp Adapter	61-436
1000AAC Flexible Current Clamp Adapter	61-330
300/3000AAC Flexible Current Clamp Adapter	61-331

See page E-34 for more information



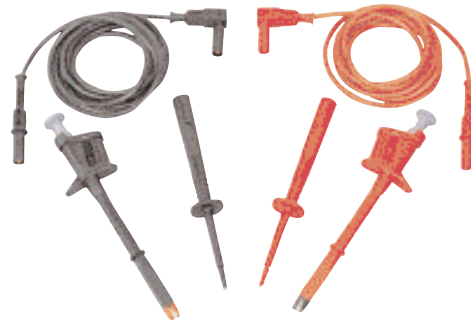
## Test Lead Kits



TL-435

Industrial Test Lead Kit

**Kit contains:** 1.5m silicone lead set, probes w/SS tips, rigid alligator clips, flex pincer clips, insulated alligator clips, insulated spade lugs and padded zipper pouch, 1000V, 10A rating



TL-436

Electrical Test Lead Kit

**Kit contains:** 1.5m silicone lead set, probes w/SS tips, insulated alligator clips and tri-fold pouch, 1000V, 10A rating



## Clamp Meter Selection Guide

CLAMP METER SELECTION GUIDE	61-452	700 Series				710		720 Series				740 Series				760	
		61-701	61-702	61-704	61-710	61-711	61-720	61-722	61-724	61-726	61-734	61-740	61-741	61-742	61-760	61-762	
<b>MEASUREMENT FUNCTIONS</b>																	
AC Voltage	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
DC Voltage		•	•	•	•		•	•	•	•	•	•	•	•	•	•	
AC Current	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
DC Current									•	•			•	•			
Resistance	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Audible Continuity	•	•	•	•			•	•	•	•	•	•	•	•	•	•	
Diode Test		•	•	•			•	•	•	•			•	•	•	•	
Capacitance		•	•	•					•								
Frequency		•					•	•	•								
Temperature					•												
Leakage Current	•																
<b>FEATURES</b>																	
Display Type (Analog or Digital)	D	D	D	D	A	A	D	D	D	D	D	D	D	D	D	D	
AC Current Capacity	60	200	200	200	600	300	1000	1000	1000	1000	400	2000	2000	2000	600	600	
DC Current Capacity									1200	1200			2000	2000			
True RMS				•				•	•	•				•		•	
Auto/Manual Ranging									•			•	•	•			
Data Hold	•	•	•	•			•	•	•	•	•	•	•	•	•	•	
Max Hold		•	•	•			•	•				•					
Peak Hold							•		•							•	
Min/Max	•									•							
DCA Zero									•	•		•	•				
Pointer Lock					•	•											
High Speed Analog Bar Graph	•									•							
Auto Power Off	•	•	•	•			•	•	•	•	•					•	
Non-Contact Voltage Indication		•	•	•												•	
Harmonics Indicator			•	•													
Vibration Mode			•	•													
Analog Output												•	•				
Backlight				•				•									
Low Battery Indication	•	•	•	•			•	•	•	•	•	•	•	•	•	•	
High Voltage Warning	•	•	•	•													
Overload Protection	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	
Conductor Size - Inches (mm)	1.18" (30)	1.3" (33)	1.3" (33)	1.3" (35)	1.18" (30)	1.3" (33)	1.8" (46)	1.8" (46)	1.8" (46)	1.8" (46)	1.18" (30)	2.16" (55)	2.16" (55)	2.16" (55)	1.3" (33)	1.3" (33)	
Warranty*	L	L	L	L	5	5	L	L	L	L	L	L	L	L	L	L	
<b>CERTIFICATIONS</b>																	
UL 3111-1 Listed	•	•	•	•			•	•	•	•	•					•	
cUL or CSA	•	•	•	•			•	•	•	•	•					•	
CAT III Rating	•	•	•	•			•	•	•	•	•	•	•	•	•	•	
CE	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	

\*L=Lifetime Limited Warranty

## 4-in-1 Test Tool

### Features



- 200AAC current capability
- Non-contact voltage (40-600VAC)
- Capacitance
- Low battery indication
- Overload protection on all ranges
- Integral lead storage
- Audible dangerous voltage warning on all ranges
- Auto power off
- Ergonomic hourglass shape
- Compact clamp head

61-704

True RMS, backlight, vibration mode to verify AC voltage, harmonics indicator, max hold, CAT III 1000V



**200 Amp Clamp/Multimeter**  
Use it for testing a variety of electrical parameters on branch circuits or at receptacles.

61-702

Vibration mode to verify AC voltage,



**Non-Contact Voltage Tester**  
Use it for one-touch indication of power without test leads.

61-701

Frequency, data hold, max hold, CAT III - 600V



**Voltage Tester with Shaker**  
Use it for tactile feel of AC voltage

### Accessories

Includes	
Carrying Case	C-700
Silicone Test Leads	TL-102

	61-701		61-702 & 61-704	
	RANGE & RESOLUTION	BASIC ACCURACY	RANGE & RESOLUTION	BASIC ACCURACY
AC VOLTAGE	200.0/600 V	1.2%	2000m/200.0/750 V	1.2%
DC VOLTAGE	20.00/200.0/600 V	0.5%	2000m/200.0/1000 V	0.5%
AC CURRENT	200.0 A	3.0%	200.0 A	3.0%
RESISTANCE	200.0/200.0k $\Omega$ Scale	1.0%	200.0/200.0k $\Omega$	1.0%
CAPACITANCE	200.0 $\mu$ F	3.0%	200.0 $\mu$ F	3.0%
FREQUENCY	2.000k/20.00k/40.00k Hz (Auto)	0.1%	—	—



**Harmonics Tester**  
Use it to ensure that a circuit contains clean power, free of harmonic distortion.

## 400 Amp Clamp Meter

### Features



- 400AAC current capability
- Data hold
- Auto ranging
- Auto power off
- Low battery indication
- Overload protection on all ranges

### Accessories

Includes	
Carrying Case	C-98
Standard Test Leads	TL-58

730 Series Specifications		61-734
	RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	400.0/600 V	2%
DC VOLTAGE	400.0/600 V	1.5%
AC CURRENT	40.00/400.0 A	2%
RESISTANCE	400.0/4000 Ω	2%



61-734



730 Series

## 600 Amp Clamp Meters

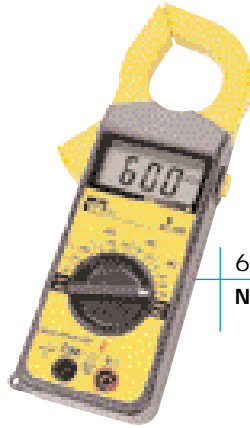
### Features



- 600AAC current capability
- Data hold
- Auto power off
- Low battery indication
- Overload protection



61-762  
True RMS,  
peak hold



61-760  
NCV

### Accessories

Includes	
Carrying Case	61-179
Standard Test Leads	TL-58

760 Series Specifications	61-760		61-762	
	RANGE & RESOLUTION	BASIC ACCURACY	RANGE & RESOLUTION	BASIC ACCURACY
AC VOLTAGE	200.0/750 V	1.0%	400.0/750 V	1.0%
DC VOLTAGE	2.000/200.0/1000 V	0.5%	4.000/40.00/400.0/1000 V	0.5%
AC CURRENT	20.00/200.0/400.0/600 A	1.5%	40.00/600 A	1.5%
RESISTANCE	200.0/200.0k $\Omega$	1.0%	400.0 $\Omega$	1.0%



## 1000 Amp Clamp Meters

### Features



- 1000AAC current capability
- Large digit display
- Data hold
- Auto power off
- Low battery indication
- Overload protection on all ranges



61-726

True RMS, AC/DC current, capacitance, frequency, peak hold, min/max, high-speed bar graph



61-720



61-722

True RMS, frequency, peak hold, max hold



61-724

True RMS, AC/DC current, frequency, max hold, backlight

### Accessories

Includes	
Carrying Case	C-91
Standard Test Leads	TL-58

720 Series Specifications	61-720		61-722		61-724		61-726	
	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	200.0/600 V	1.2%	200.0/600 V	1.2%	200.0/600 V	1.2%	4.000/40.00/400.0/600 V (Auto)	1.7%
DC VOLTAGE	2.000/200.0/600 V	0.5%	600 V	0.5%	600 V	0.5%	400.0m/4.000/40.00/ 400.0/600 V	0.25%
AC CURRENT	20.00/200.0/1000 A	1.5%	20.00/200.0/1000 A	1.5%	200.0/1000 A	1.75%	400.0/1000 A	1.75%
DC CURRENT	—	—	—	—	200.0/1200 A	1.5%	400.0/1200 A	1.5%
RESISTANCE	200.0/200.0k $\Omega$	1.2%	2.000k/200.0k $\Omega$	1.2%	2.000k/200.0k $\Omega$	1.2%	400.0/4.000k/40.00k/400.0k/ 4.000M/40.00M $\Omega$ (Auto)	0.3%
CAPACITANCE	—	—	—	—	—	—	4.000n/40.00n/400.0n/ 4.000 $\mu$ F (Auto)	3.0%
FREQUENCY	—	—	20.00/2.000k Hz (Auto)	0.1%	20.00/2.000k Hz (Auto)	0.1%	100.00/1.0000k/100.00k/ 500.0k Hz (Auto)	0.1%





## 2000 Amp Clamp Meters

### Features



- 2000A current capability
- Broad frequency response – 40Hz to 1kHz
- Low battery indication
- Overload protection on all ranges

740 Series



61-742  
True RMS, AC/DC current, analog output, diode test, peak hold



61-740  
Data hold



61-741  
AC/DC current, analog output, diode test, max hold

### Accessories

Includes	
Carrying Case	C-91
Standard Test Leads	TL-58

740 Series Specifications	61-740		61-741		61-742	
	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	40.00/400.0/750 V	1.0%	400.0/750 V	1.5%	40.00/400.0/750 V	1.5%
DC VOLTAGE	40.00/400.0/750 V	1.0%	400.0/1000 V	1.0%	40.0/400.0/1000 V	1.0%
AC CURRENT	400.0/2000 A	1.0%	400.0/2000 A	1.5%	400.0/2000 A	1.5%
DC CURRENT	—	—	400.0/2000 A	1.5%	400.0/2000 A	1.5%
RESISTANCE	400.0/4.000k/40.00k/400k Ω	1.5%	400.0/4000 Ω	1.5%	400.0/4000 Ω	1.5%
FREQUENCY	—	—	—	—	4000 Hz	1.5%



## Analog Clamp Meters

### Features

- Analog display
  - Pointer lock
  - 5-year warranty
- Includes carrying case



61-710

600AAC current, Ohms scale on dial drum, broad frequency response (50 to 400 Hz)



61-711

300AAC Current capability, DC voltage, temperature

710 Series Specifications		61-710	61-711	
	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	150/300/600 V	3.0% F.S.	150/300/600 V	3.0% F.S.
DC VOLTAGE	—	—	60 V	3.0% F.S.
AC CURRENT	6/20/60/200/600 A	3.0% F.S.	6/15/60/150/300 A	3.0% F.S.
RESISTANCE	2k $\Omega$	3.0% F.S.	1k/10k $\Omega$	2.0% F.S.
TEMPERATURE	—	—	-4° F to 302° F (-20° C to 150° C) (+/- 9° F [+/- 5° C])	

## Leakage Current Clamp Meter

### Features

- 40mA to 60AAC current capability
  - Data hold
  - Analog bar graph
  - Min/max
- Includes carrying case



61-452

Current Clamp Specifications		61-452
	RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	400.0 V	1.5%
AC CURRENT	40.00/400.0m/4.000/40.00/60.0 A	2.0%
RESISTANCE	400.0 $\Omega$	1.0%





**Features**

- Ground resistance measurements
- Auto ranging
- Auto power off



61-781

Ground Resistance Clamp  
Simple-clamp-on operation, ground leakage current, audible resistance indication, open jaw indication, data hold, protective case and calibration loop included



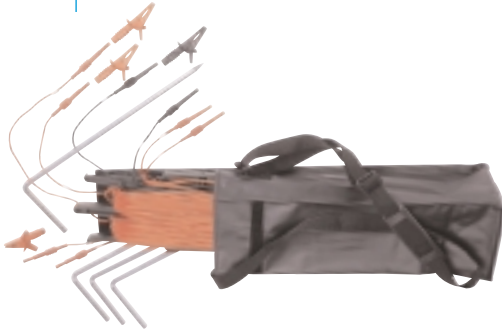
61-788

MEGGER® 3-Pole Meter  
2- & 3-point fall of potential methods, easy single push-button operation, includes terminal shorting bars, rugged weatherproof case, optional lead set (61-798) not included



61-789

MEGGER® 4-Pole Meter  
3- & 4- fall of potential methods, soil resistivity, easy single push-button operation, includes terminal shorting bars, rugged weatherproof case, optional lead set (61-798) not included.



61-798

MEGGER® Earth Resistance Lead Set Kit  
Kit includes four test leads with alligator clips (3, 15, 30, 50m), 20 in. auxiliary grounding rods (2 pr.) and padded nylon carrying case

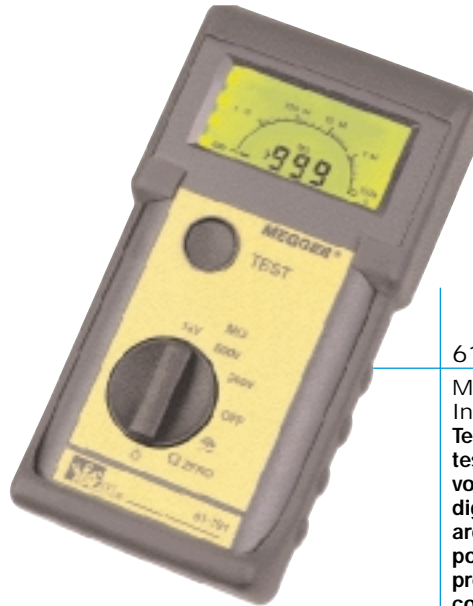
780 Series Specifications	61-781		61-788		61-789	
	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY
GROUND RESISTANCE	0.250/9.999/99.99/ 199.9/400.0/600.0/1500 Ω	1.5%	200.0/2.00kΩ	2.0%	400.0/600/1500 Ω	2.0%
GROUND LEAKAGE CURRENT	1.000m/10.00m/1000m/15.00 A	2.0%	—	—	—	—
SOIL RESISTIVITY	—	—	—	—	20.00/200.0/2.000k/20.00kΩ	2.0%

MEGGER® is a registered trademark of Megger, Inc.



## Features

- Checks new installations for proper insulation
- Checks existing installations and motor windings for breakdowns in insulation



61-791



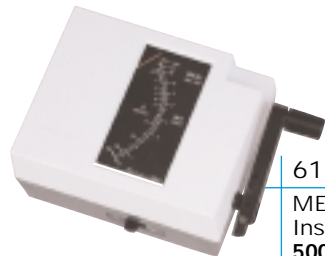
MEGGER® Hand-held Insulation Tester  
**Test voltage: 250/500/1000V, test inhibition >25V, default voltmeter to 600V AC/DC, digital display with analog arc, auto discharge, auto power off, auto ranging, protective rubber boot, continuity, low battery indication, Cat III – 300V, includes carrying case**



61-792



MEGGER® 5kV Insulation Tester  
**500V/1000V/2500V/5000V test voltages, battery or hand-crank operation, auto discharge, AC/DC voltage to 600V, battery test, Cat III-300V, includes carrying case**



61-793

MEGGER® Hand-Crank Insulation Tester  
**500V test voltage, hand-crank operation, compact and lightweight, includes carrying case**



61-785

Analog Insulation Tester  
**125/250/500/1000V test voltages, analog display, live circuit indicator, remote control test probes, backlight**

Insulation Tester Specifications	61-785		61-791		61-792		61-793	
	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY
TEST VOLTAGE	125/250 500/1000 V		250/500/ 1000 V		500/1000/ 2500/5000 V		500V	
INSULATION RESISTANCE	20M/50M/ 1000M/2000MΩ	5.0%	999MΩ	3.0%	100k - 20GΩ	5.0%	0-200MΩ	5.0%
CONTINUITY	—		0.01-100Ω	3.0%			0-100Ω	5.0%

MEGGER® is a registered trademark of Megger, Inc.







## 3-Phase Power Analyzer

The IDEAL Power Analyzer. The most versatile and easy-to-use power quality test instrument on the market. Four programs measure and analyze power quality on both single- and three-phase electrical systems. Instantaneous readouts including tables, bar graphs and even individual waveforms make job site data interpretation easy. With a real-time clock and 1MB of memory, the Power Analyzer stores data that can be downloaded to a personal computer for in-depth analysis using PowerVision™ Software.

The Energy and Harmonics Program comes standard with the IDEAL Power Analyzer. Disturbances, Check-Meter and Fast-Check Programs are available separately. These programs allow the user to monitor additional facets of power quality with a single test instrument. The details of each program are discussed on page E-37.

Everything a professional needs for monitoring and analysis in a single unit. Rugged, versatile and loaded with features including computer compatibility. There have always been test instruments that help make the job easier, but the IDEAL Power Analyzer has taken power quality analysis to a new level.



800 Series

### Features



- Single- or three-phase measurements
- True RMS
- Data logging (1MB memory)
- Auto ranging
- Min/max/avg
- Energy and Harmonics Program
- PowerVision Software
- Optional programs:  
Disturbances  
Check-Meter  
Fast-Check
- Lightweight, portable design
- Easy-to-use push-button operation
- Password protected on-screen setup
- 160 x 160 pixel LCD
- RS-232 interface
- Customized data collection
- Real-time clock
- Programmable trigger-points and start/stop time

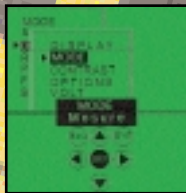
### Power Measurements

- Kilowatts (kW)
- Voltamperes (VA)
- Inductive reactive power (kvarL)
- Capacitive reactive power (kvarC)
- Power factor (PF)
- Frequency (Hz)
- Kilowatt hours (kWh)
- Reactive power per hour (kvarhL, kvarhC)

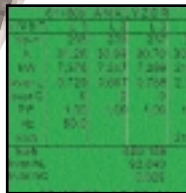
### Harmonics Measurements

- Total harmonic distortion (%THD)
- Harmonic factorization to 51st harmonic

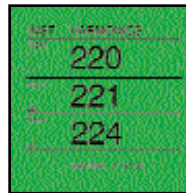
## Power Analyzer Display Screens



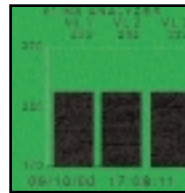
Program Setup



Table



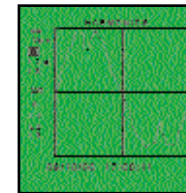
Exploded View



Bar Graph



Scope View



Waveform Zoom



## Standard Equipment



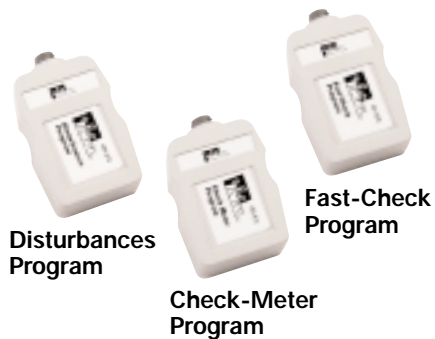
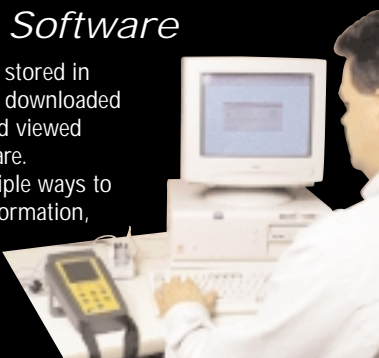
Standard Equipment	61-805	61-805-2K	61-806	61-807
Model 805 Analyzer	•	•		
Model 806 Analyzer			•	•
1000AAC Clamp Adapters (3)	•		•	•
200/2000AAC Clamp Adapters (3)		•		
100AAC Clamp Adapter (1)				•
Test Leads with Alligator clips (4)	•	•	•	•
Power supply/RS-232 Interface and Cables	•	•	•	•
PowerVision™ Analysis Software	•	•	•	•
Protective Carrying Case	•	•	•	•

Power Analyzer Specifications 61-805 & 61-806		
	RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	20 to 500 V (phase-neutral) 20 to 866 V (phase-phase)	0.5% 0.5%
AC CURRENT	10 to 1000 A (with supplied clamp adapters)	1.0%
ACTIVE POWER	866 kW (with supplied clamp adapters)	1.0%
REACTIVE POWER	866 kW (with supplied clamp adapters)	1.0%
POWER FACTOR	0.5 to 1.0	1.0%

See page E-36 for a complete listing of Power Analyzer accessories.

### PowerVision™ Software

For in-depth analysis, data stored in the Power Analyzer can be downloaded to a personal computer and viewed through PowerVision software. PowerVision provides multiple ways to view basic and detailed information, allowing you to customize readouts according to your troubleshooting needs.



See page E-37 for a complete write-up on Power Analyzer programs.

## Power Clamp Meters

### Features



- 2000A AC/DC current capability
- True RMS
- Kilowatts
- Data hold
- Auto ranging
- DC current zero function
- Overload protection

61-802

kVA, kVAR, power factor, frequency, 3-phase power calculations, dual display, memory recall

61-800

2100AAC current capability, 2500ADC current capability, temperature, analog output (current ranges), relative mode, min/max, audible continuity



An easy-to-read dual display facilitates multiple readings. A useful feature for viewing such combinations as: power factor and kW, frequency and volts, volts and amps, or kVAR and kVA.

### Accessories

Includes	
Carrying Case	C-800
Premium Test Leads w/Alligator Clips	TL-100

800 Series Specifications	61-800		61-802	
	RANGE & RESOLUTION	ACCURACY	RANGE & RESOLUTION	ACCURACY
AC VOLTAGE	4.000/40.00/400.0/600 V	1.5%	200.0/500/600 V	1.5%
DC VOLTAGE	400.0m/4.000/40.00/400.0/600 V	1.5%	200.0/500/800 V	1.5%
AC CURRENT	400.0/1000/2100 A	1.5%	200.0/500/2000 A	1.5%
DC CURRENT	400.0/2000/2500 A	1.5%	200.0/500/2000 A	1.5%
KILOWATT (TRUE POWER)	40.00/400.0/1200 kW	2.5%	100.0/1000/1200 kW	2.0%
KVAR (REACTIVE POWER)	—	—	100.0/1000/1200 kVAR	2.0%
KVA (APPARENT POWER)	—	—	100.0/1000/1200 kVA	2.0%
RESISTANCE	40.0/400.0 Ω	1.0%	—	—
FREQUENCY	—	—	50.0/60.0/400.0 Hz	0.5%
TEMPERATURE	-50.0° to 1000° F	1.0%	—	—



## Features



- Measures voltage drop under full load\*
- True RMS
- Line voltage
- Peak voltage
- Frequency
- Ground to neutral voltage
- Ground impedance
- Hot and neutral conductor impedances
- Identifies proper wiring in 3-wire receptacles
- Identifies false (bootleg) grounds
- Tests GFCIs for proper operation
- Verifies isolated grounds (with 61-176 adapter)

\*12A, 15A, 20A load tests



61-155

Tests AFCIs for proper operation



## Accessories

Includes	
Carrying Case	61-179
1' Extension Cord for 61-154, 61-155	61-182
Optional	
Ground Continuity Adapter	61-175
Isolated Ground Adapter	61-176
Alligator Clip Adapter for 61-154 & 61-155	61-183



61-154



61-156

Harmonics (%THD, to 17th harmonic), power factor, event recording

### Features

- Positively identifies circuit breakers and fuses without service interruption
- Hand-held receiver
- Visual and audible indicators
- 5-year warranty



61-055

Automatic Circuit Identifier with E-Z Check® Plus  
**Microprocessor controlled sensitivity level, verifies proper wiring, checks GFCI operation**



61-052

Circuit Identifier with E-Z Check® Plus  
**Adjustable sensitivity levels, verifies proper wiring, checks GFCI operation,**



61-510

Circuit Identifier  
**Adjustable sensitivity levels**



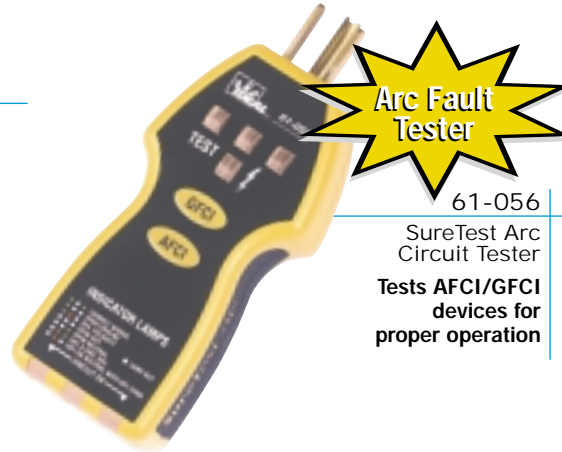
61-560

Adapter Set  
**For 61-510**

## SureTest® Arc Circuit Tester

### Features

- Tests AFCIs for proper operation
- Tests GFCIs for proper operation
- Verifies wiring configuration
- Compact size fits comfortably in pocket



61-056  
SureTest Arc  
Circuit Tester  
Tests AFCI/GFCI  
devices for  
proper operation



### Accessories

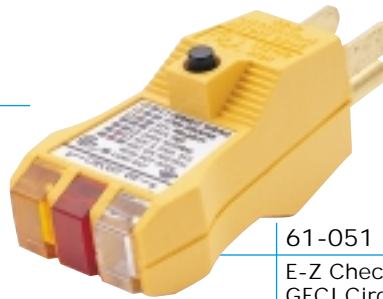
Optional	
1' Cord Adapter	61-177
Alligator Clip Adapter	61-184
Carrying Case with Belt Clip	C-50



## E-Z Check® Circuit Testers

### Features

- Tests for correct wiring, open ground, reverse polarity, open hot, open neutral, hot on neutral, hot and ground reversed with open hot, and ground fault interruption in 3-wire, 125VAC circuits
- No-slip ergonomic design maximizes comfort
- Premium neon lamps prevent false readings
- Tough, impact-resistant case
- Tests GFCI receptacles for proper operation
- 5-year warranty



61-051  
E-Z Check® Plus  
GFCI Circuit Tester  
Tests GFCI  
receptacles for  
proper operation



61-035  
E-Z Check®  
Circuit Tester



## Receptacle Testers

### Features

- Warns against faulty wiring in 3-wire receptacles
- For use on 125VAC circuits
- 5-year warranty



61-501  
GFCI  
Receptacle Tester  
Tests GFCI  
receptacles for  
proper operation



61-500  
Receptacle  
Tester





## Vol-Con® Elite

### Features



- Digital circuitry for better resolution
- Tests for AC Voltage from 24-600VAC
- Tests for DC Voltage from 6-220VDC
- Audible continuity
- Non-contact voltage indication
- Low impedance to eliminate ghost voltages
- Replaceable silicone test leads
- Integral lead storage

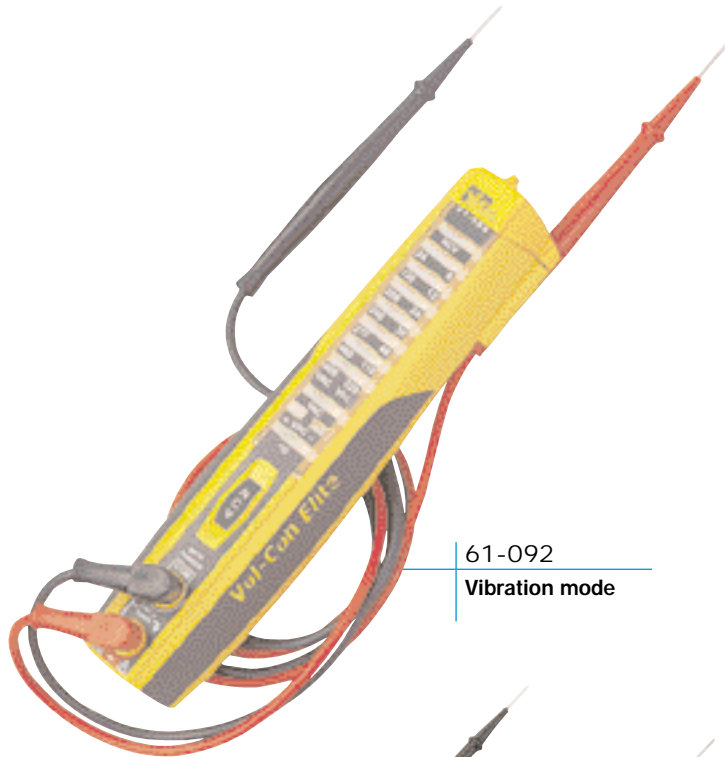
### Accessories

#### Includes

Silicone Test Leads	TL-102
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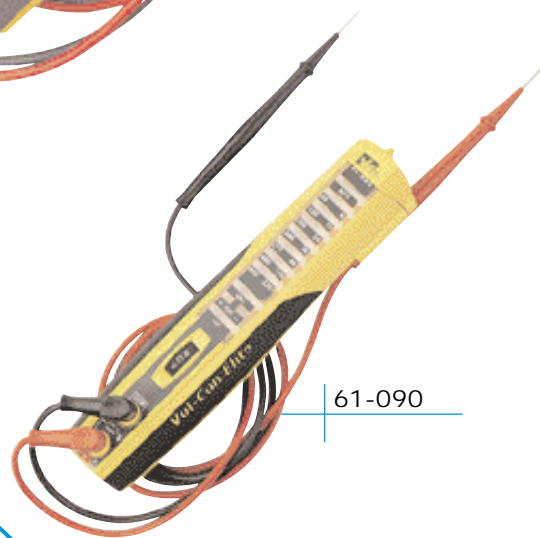
#### Optional

Carrying Case	C-90
---------------	------



61-092

Vibration mode



61-090



*Vibration mode gives a tactile indication of the voltage level.*



*Non-contact voltage sensor easily locates breaks in power cords.*



## Features

- Extremely rugged and reliable
- Vibrates when voltage is present
- Tests for AC Voltage
- Tests for DC Voltage
- Replaceable leads with shielded probe tips
- Bright, long-life LED's and neon indicator lamp
- Dual voltage indication for backup safety
- 5-year warranty

## Accessories

Includes	
Standard Test Leads	61-070
Optional	
Resistor-fused Leads*	61-072
Padded Nylon Case	C-90
Standard Leather Case	61-010
Premium Leather Case	61-020

\*Special, current-limiting resistor in each lead acts as a fuse to open in a short-circuit situation.



61-076

Vol-Con® Voltage/  
Continuity Tester  
**Automatic switching  
continuity tester, tests  
from 5-600V AC/DC**



61-065

Vol-Test® Voltage Tester  
**Tests from 80-600V AC/DC**



Features



- Extremely rugged and reliable tester
- Vibrates when voltage is present
- Tests AC/DC Voltage
- Replaceable leads with shielded probe tips
- Bright, long-life LED's and neon indicator
- Dual voltage indication for backup safety
- Compact size
- 5-year warranty



61-086  
 VoI-Con® XL  
 Voltage/Continuity  
 Tester  
**Audible continuity,  
 audible voltage  
 indication, tests from  
 6-600V AC/DC**

Accessories

Includes	
Standard Test Leads	TL-80
Optional	
Resistor-fused Leads*	TL-82
Padded Nylon Case	C-90
Standard Leather Case	61-010
Premium Leather Case	61-020

\*Special, current-limiting resistor in each lead acts as a fuse to open in a short-circuit situation.



*One hand operation makes receptacle testing quick and simple.*



61-085  
 VoI-Test® XL  
 Voltage Tester  
**Tests from  
 80-600V AC/DC**



## Features



- Split-Jaw™ current measurements
- 200AAC\* current capability
- Audible continuity
- Data hold
- Auto power off
- Replaceable test leads
- Integral lead storage
- Low battery indication



61-095  
Split-Jaw™

## Accessories

Includes	
Test Leads	TL-95
Optional	
Carrying Case	C-90

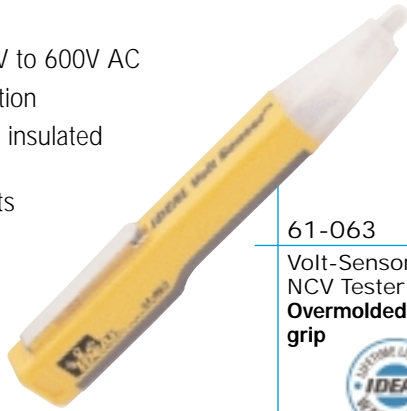
61-095 Specifications	61-095	
AC VOLTAGE	750 V	1.5%
DC VOLTAGE	1000 V	1.0%
AC CURRENT	200.0 A	3.0%
RESISTANCE	2000 Ω	1.0%

\*Note: Jaw opening is 1 in. (up to 1/0 copper cable)

## Non-Contact Voltage Tester

### Features

- Tests for voltage from 40V to 600V AC
- Audible and visual indication
- Locates breaks along live insulated wires
- Tests for energized circuits



61-063  
Volt-Sensor®  
NCV Tester  
Overmolded cushion  
grip



61-061  
Powr-Glo™  
Audible



## Continuity Tester

### Features

- Checks continuity of dead circuits and ground on conduit systems and identifies wires in multi-wire cables
- Light signal indicates completed circuit
- Bulb-in end can serve as flashlight
- Pocket clip functions as probe
- Removable 4-ft. test lead with alligator clip
- 5-year warranty

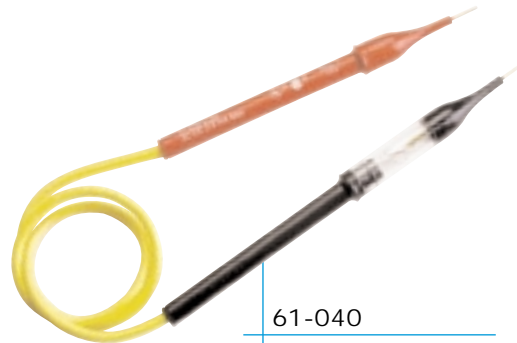


61-030  
Continuity Tester

## Circuit Tester

### Features

- Industrial-quality tester checks voltage from 80V to 600V AC/DC
- Neon test lamp at front of probe
- Resistors reduce voltage reaching leads
- 24-in. lead – rated 1,000V
- 5-year warranty



61-040  
Test-Glo™ Circuit  
Tester

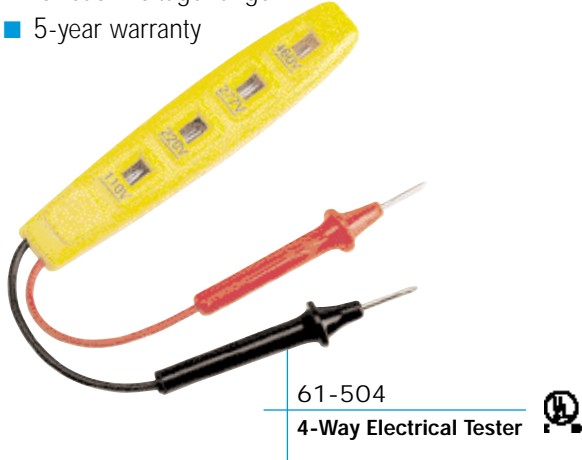




## Twin Lead Testers

### Features

- Checks 110V, 220V, 277V and 460V AC/DC
- Individual resistors and bypass resistors for each voltage range
- 5-year warranty



### Features

- Check voltage from 80V to 500V AC/DC
- Heavy-duty test probes
- 5-year warranty



## Wire Sorter

### Features

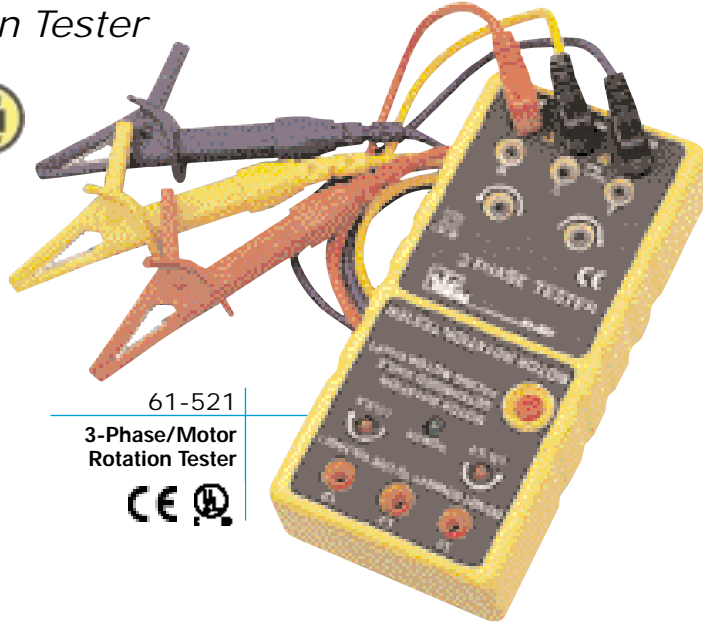
- Easily sorts up to six-single or six-pair of unpowered wires with or without a known ground path
- Quickly identifies unmarked wiring
- Locates proper wiring in bundled groups
- Works on de-energized circuits
- 5-year warranty



## 3-Phase/Motor Rotation Tester

### Features

- Identifies three-phase sequence
  - Indicates motor rotation
  - Checks for open phases
  - For use up to 600V
  - Meets IEC-1010 (EN61010) safety requirements
  - 5-year warranty
- Includes carrying case



61-521

3-Phase/Motor  
Rotation Tester



## Phase Rotation Tester

### Features

- For use up to 600V
  - Broad operating range
  - Color-coded insulators over alligator clips
  - Shock-resistant housing
  - No exposed metal parts
  - Easy-to-read
  - 5-year warranty
- Includes carrying case



61-520

Phase Rotation  
Tester



## Light Meter

### Features

- Wide lighting range
- Foot candle and lux measurement
- Remote light sensor
- Cosine and color corrected
- Peak hold
- Digital and analog output
- Compact and lightweight
- Low battery indication
- 5-year warranty

Includes carrying case



61-681

Digital Light Meter



Light Meter Specifications		61-681
FOOT CANDLES	20.00/200.00/2000.0/200000	2%
LUX	20.00/200.00/2000.0/200000	2%

## Infrared Thermometer

### Features

- 15:1 angle of viewability
- Built-in laser pointer
- Backlit display
- Auto power off
- Measures temperatures from 0° F to 500° F (-18° C to 260° C)
- 5-year warranty

Includes carrying case



61-682

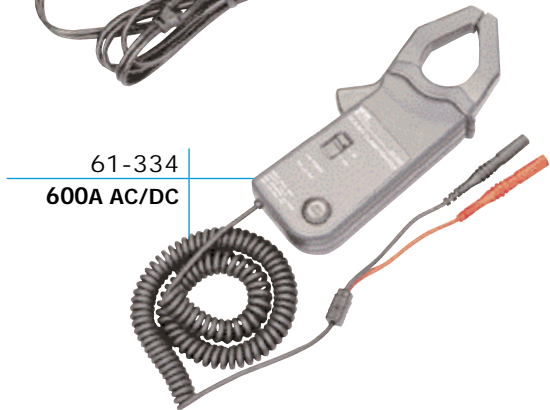
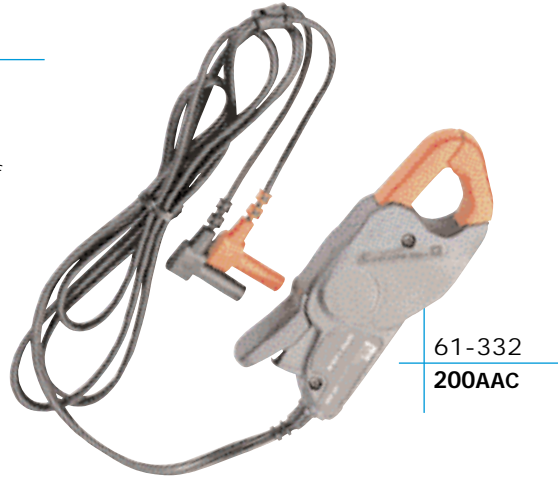
Infrared Thermometer



Specifications		61-682
RANGE & RESOLUTION	ACCURACY	
0° F to 500° F (-18° C to 260° C)	3.0%	

### Features

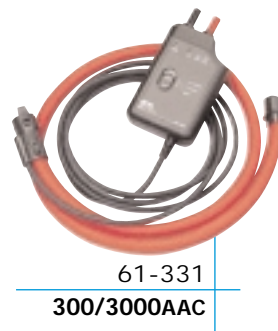
- Provide safe, easy measurement of AC current
- Extend the current measurement capabilities of digital multimeters



### Flexible Clamp Adapters

### Features

- Provide safe, easy measurement of high AC currents
- Large opening and flexible materials to wrap around conductors and bus bars
- Shape Memory allows pre-forming before installation
- Extend the current measurement capabilities of digital multimeters



Specifications	61-330	61-331	61-332	61-333	61-334	61-436	61-451
AC CURRENT	1000 A	300/3000 A	200 A	500 A	600 A	1000 A	300 A
DC CURRENT	—	—	—	—	600 A	—	—
OUTPUT SIGNAL	1mV/A	1mV/A/10mV/A	1mV/A	1mV/A	1mV/A	1mV/A	1mV/A
MAX CONDUCTOR SIZE	8" (19cm)	8" (19cm)	0.78" (19.8mm)	1.18" (30mm)	1.125" (28.5mm)	2.25" (57.1mm)	0.91" (23mm)
SENSOR LENGTH	24" (61cm)	36" (91cm)	—	—	—	—	—

## ProVision™ Software

The easy-to-use ProVision Software allows users to translate the data into a wide range of graph and table formats for in-depth analysis. It's a valuable resource for both troubleshooting and ISO compliance.

### Features

- Creates easy-to-read tables and graphs
- Retrieves data stored in PlatinumPro® meters
- Virtual DMM for real-time viewing of data acquisition
- Export files to a spreadsheet or database for storage and analysis
- Compatible with Windows 98, 2000, NT and XP



61-904  
320 Series ProVision™ Software



61-900  
490 Series ProVision™ Software



61-901  
630 Series ProVision™ Software

## RS-232 Cables



61-902  
Optical RS-232  
Cable  
For 490 and 630  
Series Meters



61-905  
Optical RS-232  
Cable  
For 320 Series  
Meters





C-1000  
Carrying Case



61-454\*  
61-811\*\*

1000AAC Clamp Adapter  
(set of 3)

PS-351\*  
PS-352\*\*

RS-232 Interface/  
Power Supply with  
cables

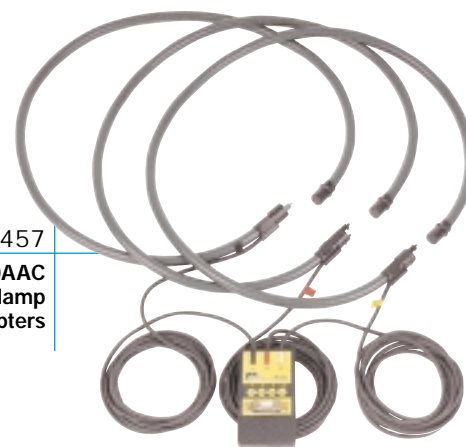


TL-805

Voltage Leads with  
Alligator Clips



Description	Cat. No.
200/2000AAC clamp adapters for 61-805 (set of 3)	61-453
1000AAC clamp adapters for 61-805 (set of 3)	61-454
500AAC clamp adapters for 61-805 (set of 3)	61-455
5AAC clamp adapters for 61-805 (1)	61-456
200/2000/20000AAC Flexible Clamp Adapters (set of 3)	61-457
Disturbances program for 61-805	61-474
Check-Meter program for 61-805	61-475
Fast-Check program for 61-805	61-476
200/2000AAC clamp adapters for 61-806 (set of 3)	61-810
1000AAC clamp adapters for 61-806 (set of 3)	61-811
500AAC clamp adapters for 61-806 (set of 3)	61-812
100AAC clamp adapter for 61-806 (1)	61-813
5AAC clamp adapter for 61-806 (1)	61-814
Disturbances program for 61-806	61-815
Check-Meter program for 61-806	61-816
Fast-Check program for 61-806	61-817



61-457

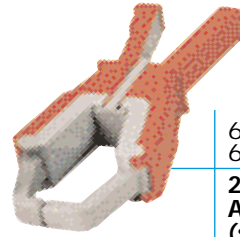
200/2000/20000AAC  
Flexible Clamp  
Adapters

\* For use with 61-805

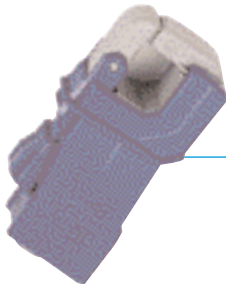
\*\* For use with 61-806/807



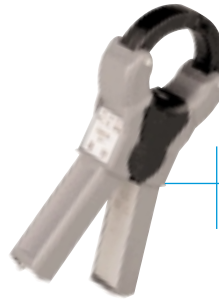
61-455\*  
61-812\*\*  
**500AAC Clamp Adapter (set of 3)**



61-453\*  
61-810\*\*  
**200/2000AAC Clamp Adapter (set of 3)**



61-456\*  
61-814\*\*  
**5AAC Clamp Adapter**



61-813\*\*  
**100AAC Clamp Adapter**

## Power Analyzer Programs

Extend capabilities of 800 series Power Analyzer. Up to four programs loaded on analyzer.



61-474\*  
61-815\*\*  
Disturbances Program  

- Tracks sags, swells and transients
- Programmable trigger points
- Captures individual waveforms for analysis



61-475\*  
61-816\*\*  
Check-Meter Program  

- Monitors performance of in-line energy meters
- Stores data and provides comparison against mechanical or electrical meters
- Monitors key power and energy measurements

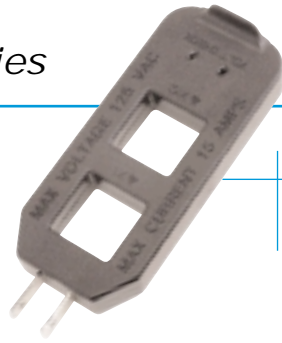


61-476\*  
61-817\*\*  
Fast-Check Program  

- Captures transient waveforms caused by motor start-ups
- Monitors key power and energy measurements

\* For use with 61-805  
\*\* For use with 61-806/807

## Digital Multimeter and Clamp Meter Accessories



61-561  
Line splitter with direct and 10x sensitivity

## Thermocouples

### Features

- Measures up to 1500° F (816° C)
- K-type thermocouples plug into digital multimeter or clamp meter voltage ports with 61-465 adapter

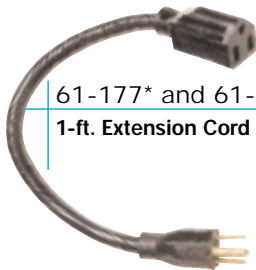


61-465  
Thermocouple Adapter

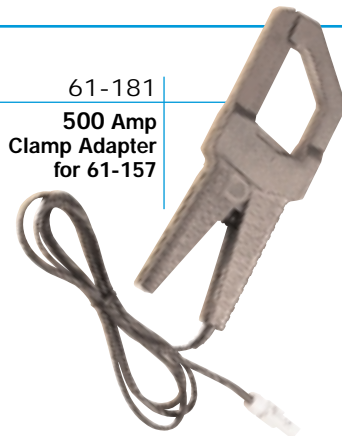


61-461  
Beaded K-type thermocouple

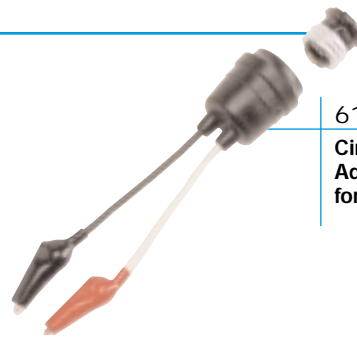
## SureTest® Accessories



61-177\* and 61-182\*\*  
1-ft. Extension Cord



61-181  
500 Amp Clamp Adapter for 61-157



61-560  
Circuit Identifier Adapter Set for 61-510

61-175 and 61-176  
Ground Continuity and Isolated Ground Adapters, respectively



61-183\*\* and 61-184\*\*\*  
Alligator Clip Adapters

\* For use with 61-156/61-157  
\*\* For use with 61-154/61-155  
\*\*\* For use with 61-056



61-010  
Leather case for use with voltage testers



61-445  
Small nylon carrying case with four convenient pockets

C-290  
Nylon carrying case for use with DMM's



61-179  
Nylon carrying case for use with SureTest® Circuit Analyzers, 730 Series and 760 Series Clamp Meters



61-020  
Premium leather case for use with voltage testers



C-90  
Nylon carrying case for use with all Vol-Con® and Vol-Test® Testers



C-700  
Nylon carrying case for use with the 700 Series Clamp Meter



61-447  
Large nylon carrying case with six large inside pockets and one zippered outside pocket



## Carrying Case Selection Guide

Selection Guide

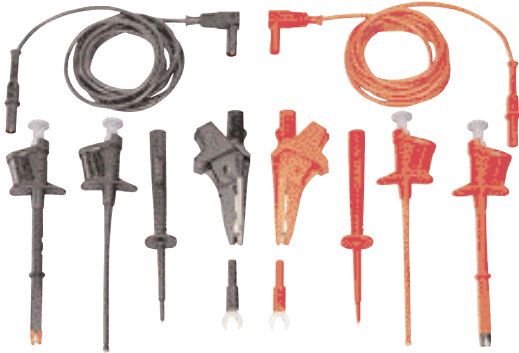
MULTIMETER CARRYING CASE SELECTION GUIDE		320 Series			360		480		490		600 Series				610		630	
		61-320	61-322	61-324	61-360	61-361	61-481	61-482	61-494	61-495	61-601	61-602	61-603	61-609	61-610	61-614	61-633	61-635
C-290	Nylon Carrying Case	•	•	•	•	•	•	•	•							•	•	

CLAMP METER CARRYING CASE SELECTION GUIDE		61-452	700 Series			720 Series				740 Series			760		800	
			61-701	61-702	61-704	61-720	61-722	61-724	61-726	61-734	61-740	61-741	61-742	61-760	61-762	61-800
61-179	Nylon Carrying Case														•	•
C-452	Nylon Carrying Case	•														
C-700	Nylon Carrying Case		•	•	•											
C-800	Nylon Carrying Case														•	•
C-90	Carrying Case								•							
C-91	Nylon Carrying Case					•	•	•	•							

TESTER CARRYING CASE SELECTION GUIDE		Voltage Testers							SureTest®				
		61-065	61-076	61-085	61-086	61-090	61-092	61-681	61-682	61-154	61-155	61-156	61-157
61-010	Leather Tester Case	•	•										
61-020	Premium Leather Tester Case	•	•										
61-179	Nylon Carrying Case										•	•	•
61-445	Small Carrying Case										•		
C-90	Nylon Carrying Case	•	•	•	•	•	•	•	•				



## Test Lead Kits



TL-435

### Industrial Test Lead Kit

Kit contains: 1.5m silicone lead set, probes w/SS tips, rigid alligator clips, flex pincer clips, insulated alligator clips, insulated spade lugs and padded zipper pouch, 1000V, 10A rating

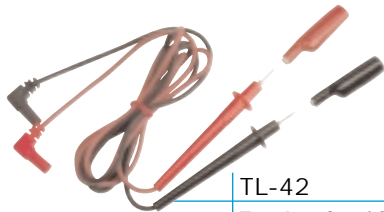


TL-436

### Electrical Test Lead Kit

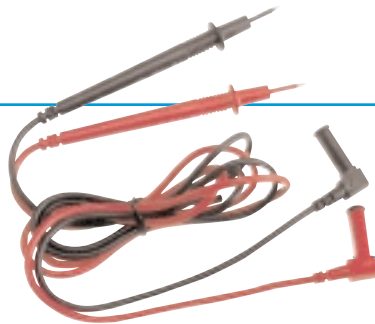
Kit contains: 1.5m silicone lead set, probes w/SS tips, insulated alligator clips and tri-fold pouch, 1000V, 10A rating

## Test Leads



TL-42

Test Leads with alligator clips



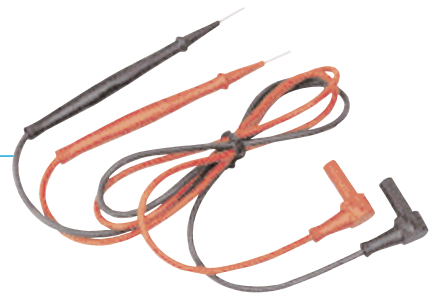
TL-58

Standard Test Leads



TL-100

Premium Test Leads with alligator clips



TL-102  
Silicone Test Leads



## Replacement Parts Selection Guide

MULTIMETER REPLACEMENT PARTS SELECTION GUIDE			320 Series			360		480		490		600 Series				610		630	
			61-320	61-322	61-324	61-360	61-361	61-481	61-482	61-494	61-495	61-601	61-602	61-603	61-609	61-610	61-614	61-633	61-635
<b>FUSES</b>																			
F-1	0.5A (250V)	0.25 x 1.25 in.																	
F-7	0.5A (250V)	5 x 20mm																	
F-16	0.25A (250V)	5 x 20mm																	
F-17	0.8A (250V)	0.25 x 1.25 in.																	
F-100	1A (500V)	.25 x 1.25 in.																	
F-101	16A (500V)	.25 x 1.25 in.																	
F-102	1A (600V)	.41 x 1.5 in.																	
F-103	16A (600V)	.41 x 1.5 in.																	
LA-3893	2A (600V)	6.35 x 25.4mm																	
LA-3895	0.5A (250V)	5 x 20mm																	
LA-3896	0.5A (500V)	6.35 x 32mm																	
LA-3897	10A (600V)	6.35 x 25.4mm																	
LA-3898	0.1A (250V)	5 x 20mm																	
<b>BATTERIES</b>																			
61-201	1.5V (LR44)																		
B-4	9V																		
B-1	1.5V (AA)																		
B-7	1.5V (AAA)																		
<b>TEST LEADS</b>																			
TL-34	Leads w/pin connectors																		
TL-58	Standard																		
TL-54	Test Leads																		
TL-100	Premium leads w/alligator clips																		
TL-102	Silicone test leads																		
<b>RUBBER BOOTS</b>																			
61-370	360 Series rubber boot																		
C-92	Pocket-style meters rubber boot																		
C-320	320 Series rubber boot																		
C-480	480 Series rubber boot																		
C-490	490 Series rubber boot																		
C-630	630 Series rubber boot																		

CLAMP METER REPLACEMENT PARTS SELECTION GUIDE			700 Series				710		720 Series				760		740 Series			800	
			61-452	61-701	61-702	61-704	61-710	61-711	61-720	61-722	61-724	61-726	61-734	61-760	61-762	61-740	61-741	61-742	61-800
<b>FUSES</b>																			
F-1	0.5A (250V)	0.25 x 1.25mm																	
<b>BATTERIES</b>																			
B-4	9V																		
B-1	1.5V (AA)																		
<b>TEST LEADS</b>																			
TL-58	Standard																		
TL-100	Premium leads w/alligator clips																		
TL-102	Silicone test leads																		



## LANTEK® 6 & LANTEK® 7 LAN Cable Certification Testers



### LANTEK® 6B Certifier - Basic

- Certify up to CAT 6 / ISO E limits (250 MHz) and beyond to 350 MHz
- 25 second CAT 6 full certification
- Upgradeable to LANTEK 7

### LANTEK® 7B Certifier - Basic

- Certify up to CAT 7 / ISO F limits (600 MHz) and beyond to 750 MHz
- 35 second CAT 7 full certification
- Includes two each CAT 6 and ISO F CAT 7 TERA™ adapters

### LANTEK® 6P and LANTEK® 7P Certifier - Premium

Includes the features of the LANTEK 6B or 7B plus the features listed in the charts below.

Features	LANTEK6B	LANTEK6P
Soft carrying case	✓	
Display unit with battery	✓	✓
Remote unit with battery	✓	✓
LANTEK Reporter Software	✓	✓
Serial & USB cables	✓	✓
Two talksets & two AC wall adapters	✓	✓
User manual, quick start guide & registration card	✓	✓
Two Category 6 channel adapters	✓	✓
Two Category 6 Reference patch cords	✓	✓
Hard carrying case		✓
PCMCIA Adapter		✓
64 MB compact flash		✓
USB port flash reader for PC		✓
Batteries (2) extra		✓
Offline dual bay battery charger		✓

### Features of LANTEK® Products

- TDR capability that works with copper and fiber
- Permanent link testing using inexpensive patch cables, provides more versatility and lowest cost of ownership in the industry
- Link adapter fits into case, no bulky adapters extending from unit
- Display or remote unit can initiate Autotest, Escape and Talk feature
- PCMCIA dual slot provides for CompactFlash™ external memory and future capabilities
- USB and RS232 ports
- Fiber and coax testing options available

Features	LANTEK7B	LANTEK7P
Soft carrying case	✓	
Display unit with battery	✓	✓
Remote unit with battery	✓	✓
LANTEK Reporter Software	✓	✓
Serial & USB cables	✓	✓
Two talksets & two AC wall adapters	✓	✓
User manual, quick start guide & registration card	✓	✓
Two Category 7 channel adapters	✓	✓
Two Category 6 channel adapters	✓	✓
Two Category 7 Reference patch cords	✓	✓
Two Category 6 Reference patch cords	✓	✓
Hard carrying case		✓
PCMCIA Adapter		✓
64 MB compact flash		✓
USB port flash reader for PC		✓
Batteries (2) extra		✓
Offline dual bay battery charger		✓

### Other LANTEK Accessories

Description	Cat. No.
64MB Compact Flash Memory Card	2112-27-0605
Fiber Cleaning Starter Kit	1219-00-1621
Tera Adapter Testing Kit	1019-00-1105
Coax Adapter Testing Kit	1019-00-0343

See your IDEAL representative for additional specifications on all certification products

## FIBERTEK™ and TRACETEK™ Advanced Fiber Test Options



### FIBERTEKMMB Multimode Fiber Testing Basic Kit

- Provides easy switching of LANTEK® Cable Tester between Copper and Fiber LAN testing
- Separate loopback testing method for high precision length
- Includes 850 VCSEL and 1300nm Fabry Perot lasers for testing Gigabit Ethernet systems
- Outstanding Temperature Compensation provides highly accurate test results in a wide variety of environments

### FIBERTEKMMP Multimode Fiber Testing Premium Kit

- All of the features of the FIBERTEKMMB plus TRACETEK™ MM (below):

### Features of TRACETEK™ Products

- Enables LANTEK® certification testers to provide an event trace at a fraction of the price of an OTDR
- Provides easy switching of LANTEK® certification tester between FIBERTEK™ loss and length measurement and TRACETEK™
- Includes event plots that pinpoint significant losses along the fiber
- Provided with launch cable and appropriate connectors

### Features of FIBERTEK™ Products

- Measures signal loss and length
- 850nm VCSEL light source enables Gigabit Ethernet certification on Multimode fiber
- Enables bi-directional, dual wavelength measurements
- Full duplex talkset capability

### FIBERTEKSMB Singlemode Fiber Testing Basic Kit

- Provides easy switching of LANTEK® Cable Tester between Copper and Fiber LAN testing
- Separate loopback testing method for high precision length
- Includes 1310 and 1550nm adapters powered by Fabry Perot lasers
- Outstanding Temperature Compensation provides highly accurate test results in a wide variety of environments

### FIBERTEKSMP Singlemode Fiber Testing Premium Kit

- All of the features of the FIBERTEKSMB Plus TRACETEK™ SM (below):

Description	Cat. No.
Hard case, 850 & 1300 Adapters with ST® Connectors, ST® Launch Cables & ST® Sleeves	<b>FIBERTEKMMB</b>
All contents of FIBERTEKMMB and TRACETEKMM	<b>FIBERTEKMMP</b>
Hard case, 1310 & 1550 Adapters with FC Connectors, FC Launch Cables & FC Sleeves	<b>FIBERTEKSMB</b>
All contents of FIBERTEKSMB and TRACETEKSM	<b>FIBERTEKSMP</b>
TRACETEK™ MM Adapter with FC to ST® Launch Cable	<b>TRACETEKMM</b>
TRACETEK™ SM Adapter with FC to FC Launch Cable	<b>TRACETEKSM</b>
All contents of FIBERTEKMMB and FIBERTEKSMB	<b>FIBERTEKALLB</b>
All contents of FIBERTEKMMP and FIBERTEKSMP	<b>FIBERTEKALLP</b>

Note: ST® is a registered trademark of AT&T.

*See your IDEAL representative for additional specifications on all certification products*



## LT8000 Series Cable Certification Testers



### LT8600 and LT8155

- Built in TDR capability provides easy to use analysis capability
- Options for Singlemode and Multimode power and light source meter testing
- LT-Record Manager software supports all record keeping, reporting requirements
- Built-in tone generator
- Talk-set feature
- Uses job folders

### LT8600T

- Certify any Category cable (3, 5, 5e, 6) up to 300 MHz
- Storage capacity: 1,500 Autotests
- LT8600T comes in soft carrying case
- LT8600TSP comes in hard carrying case

### LT8155T

- Certify any Category cable (3, 5, 5e) up to 155 MHz
- Storage capacity: 1,500 Autotests
- LT8155T comes in soft carrying case

### LT8100A

- Certify any Category cable (3, 5, 5e) up to 100 MHz
- Storage capacity: 150 Autotests
- LT8100A comes in soft carrying case

### Accessories for LT8000 Series

Description	Cat. No.
Headsets, includes (2) headsets w/earphone and microphone, Vinyl	LT8TALKSET
Extra or replacement Battery pack for display or remote handsets	LT8BATTPACK
Field Calibration Adapter	LT8FIELDCAL
Deluxe hard-shell carrying case	LT8DCCA
Set of 2 110-Block Link Adapters	LT8110
Set of 2 Token Ring Link Adapters (Type 1, 1A, 2, 6, 6A IBM cabling) (ThinNet), BNC-to-N Adapters for 10Base-5 (ThickNet) and BNC-to-	LT8IBMA
Set of 2 RJ-45 CAT5/5E Basic Link Adapters for LT8100 and LT8155	LT8BASIC
Set of 2 CAT5/5E Channel Adapters with 8-pin Modular Jack	LT8CHANNEL
Powerful graphical analysis software package for PC and Notebook	LTGA
TDR upgrade kit for LT8155 and LT8600 Installed Base	TDRKIT
Set of 2 replacement rubber boot protectors for LT8000 headsets	LT8BOOT
LT8000 Series user's guide	LT8MANUAL
Guide to LAN Installation and Testing	LANHDBK
AC Power Line Adapter, 120V/60Hz w/USA and Canada Style Wall Plug, Compatible with the LT8000 Series and LANTEK Pro/XL	LT8USCAN

### Category 6 Adapters

Description	Cat. No.
ACKERMANN, WAEG6	B6IDEAL001
ACTERNA, General	B6IDEAL001
AMP, STP	B6IDEAL001
BTR TELECOM, UE-DAT-300E and E-DAT-200	B6IDEAL001
KERPEN, Eline	B6IDEAL001
ORTONICS, GigaMo+	B6IDEAL001
NEXANS, Class E/Class 6	B6NEXANS001
AMP Netconnect, Quantum UTP	B6AMP002
AVAYA, Gigaspeed	B6Lucent001
Brando-Rex, CAT6Plus	B6BRDREX001 thru B6PANDUIT001
Hitachi - Manchester, Lantegra	B6SMP001
HUBBELL, Next Speed XceleratorH XJ6 & 670	B6HUBBELL001
IBM, Silver Class E	B6-IBM-CLASS E
IBM, Silver Generic Cat 6	B6IBM-GENERIC
INFRA IBCS	B6INFRA+001
LEVITON, XCS	B6LEVITON003
MOLEX, PowerCat	B6MOLEX001
NEXANS, Class E/Category 6	B6NEXANS001
NORDX/CDT 4800LX	B6NORDX001
NORDX/CDT, Bix, Channel Test Leads	B6NORDXBIX001
PANDUIT, TX-6 Giga-Channel	B6PANDUIT001

## LinkMaster™ Tester



**Works Great on CAT 5 Cabling**

Tests wiring configurations on UTP/STP cables. Checks for shorts, miswires, reversals and split pairs. Debug feature, automatic shut-off and low battery LED indication.

- Designed to test installed twisted pair wiring
- Tests unshielded and shielded modular plugs
- Main unit and remote allow one person testing

Description	Cat. No.
LinkMaster™ Tester and Remote	62-200

## DataLite™ Cable Identifier



62-292

The most efficient method of identifying and troubleshooting mislabeled networks. From a workstation outlet, DataLite™ unit sends an electronic signal to patch panel. Modules, plugged into patch panel, illuminate to indicate location of terminated cable.

- Works on any communication wiring schematic
- Quickly and accurately matches a patch panel port to its corresponding workstation
- Eliminates need to pre-label and sequentially order cable

Description	Cat. No.
DataLite™ Unit w/ 25 Modules (Blister Card)	33-840
DataLite™ Kit w/ 2 Power Units & 100 Modules (w/case)	33-841
DataLite™ Kit w/ 2 Power Units & 300 Modules (w/case)	33-843
DataLite™ Main Power Unit	62-292
Box of 100 Modules	ND-2055

## VDV MultiMedia Cable Tester

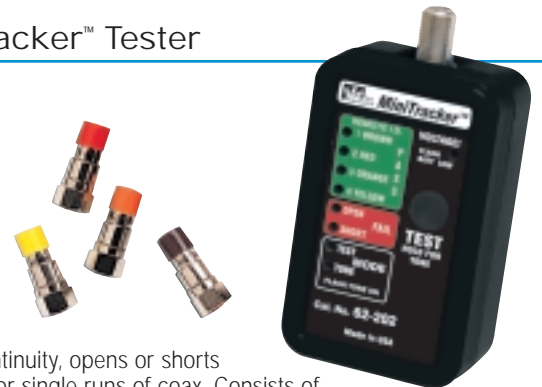


Easy-to-use tester for installers working with voice, data and video applications. One tester for all applications!

- **Voice** – supports 3-pair USOC and 6-position RJ-11/12 jacks for telephone cable testing
- **Data** – supports both shielded and unshielded cable testing to T568A/B (RJ-45)
- **Video** – tests coax cable for opens and shorts with F-connector interface
- Tests for opens, shorts, miswires, reversals and split pairs. Also indicates correct wiremap. Has automatic shut off (to prolong battery life) and low battery indicator.
- Easy to read LCD display with “PASS or FAIL” indicator after each test
- Tone generator supports 4 different tones making fault isolation easier
- Identifies voltage on cables
- One remote wiremap and testing unit is stored inside tester—easier to keep all parts together
- Uniquely designed remote accommodates RJ-11, RJ-45 and F-style connectors
- Can support up to 8 unique remotes that wiremap and test ports – more efficient for one person testing (must order separately)

Description	Cat. No.
Kit with integrated remote and accessories	62-300

## MiniTracker™ Tester



Test for continuity, opens or shorts in multiple or single runs of coax. Consists of main unit and four remote color-coded F-type terminators. Each terminator has a unique resistor value. A main unit and a least one remote terminator are required to perform coaxial cable testing.

- Identifies, or “maps”, different cable end points and cable runs within a structure by identifying remote terminator color code
- Tone mode can be used to send a tone signal on coaxial cable for tracing
- Designed specifically for cable TV, security video, broadcast and building/home automation system applications

Description	Cat. No.
MiniTracker™ Tester with 4 F-Type Terminators	62-202

## LinkMaster™ PRO XL

The LinkMaster™ PRO XL Tester enables installers, contractors and maintenance technicians to map, test and troubleshoot data and voice communication cable and coax runs. Rugged, versatile, and easy-to-use, they have mastered the link between performance, simplicity and value for both commercial and residential applications.

- Back-lighted LCD screen - **NEW FEATURE**
- Blinks the hub - **NEW FEATURE**
- Has increased voice testing capabilities - **NEW FEATURE**
- Displays length measurement with test results - **NEW FEATURE**
- Remotes have both RJ-11 and RJ-45 jacks - **NEW FEATURE**
- Tests UTP for shorts, opens, miswires, reversals, split pairs and shield continuity
- Tests coax for opens and shorts
- Shows wiring errors
- Tests and identifies with all eight twisted pair and coax remotes
- Sends tone with four different signals
- Displays test results in wire map format
- Snap-off battery cap

**NEW**

- Remote Jack for Patch Cords
- Main Jack for all Testing
- Larger Back-lighted LCD Screen
- Six Modes of Operation
  - Cable Test
  - Hub Blink
  - Tone
  - Length
  - Coax
  - Setup Mode
- Press SEL to:
  - Turn on back-light (Hold 2 sec)
  - Execute current displayed mode
  - Start new test cycle
  - Select one of four tones
  - Change pair being measured for length
  - Change user selectable options
    - Beep On/Off
    - Unshielded or Shielded Cable
    - Units—Feet or Meters
- Arrow Keys
  - To change length constant (see chart for required parameters)
  - To change pair or pin selection for tone
  - To scroll through setup selectable options



## LinkMaster™ PRO XL and ABS™ Deluxe Kit

Everything you need to perform all test functions for up to eight remote mapping locations on twisted pair and coax cable is included in this kit. ABS™ tester detects dial tone, polarity, presence of power, and is an amplifier probe for tone tracing.



- Main tester
- ABS™ tester
- Eight twisted pair remotes
- Eight CATV color-coded F-Terminators
- Nine RJ-45 shielded jumper cables
- Nine RJ-11 jumper cables
- RJ-45 and RJ-11 adapter
- RJ-45 to alligator clip cable assembly
- RJ-11 to alligator clip cable assembly
- Carrying case

Description	Cat. No.
Deluxe Kit with ABS™	<b>33-881</b>
Replacement Carrying Case	<b>H-3412</b>

## LinkMaster™ PRO XL Kit

Everything you need to perform all test functions for up to eight remote mapping locations on twisted pair and coax cable is included in this kit.



- Main tester
- Eight twisted pair remotes
- Eight CATV color-coded F-Terminators
- Nine RJ-45 shielded jumper cables
- Nine RJ-11 jumper cables
- RJ-45 and RJ-11 adapter
- RJ-45 to alligator clip cable assembly
- RJ-11 to alligator clip cable assembly
- Carrying case

Description	Cat. No.
Kit (POP Packaging)	<b>33-880</b>
Kit (International Packaging)	<b>33-886</b>
Replacement Carrying Case	<b>H-3412</b>
Economy Kit w/one remote (International packaging)	<b>33-887</b>
RJ-45 to RJ-11 jack adapter (2/card) POP packaging	<b>LA-4233</b>
RJ-45 to F-connector adapter (2/card) POP packaging	<b>LA-4234</b>
LinkMaster™ remotes 2 through 8 only (white carton & thermal label)	<b>LA-4235</b>

## LinkMaster™ PRO Tester



The popular LinkMaster™ PRO Tester enables installers, contractors and maintenance technicians to map, test and troubleshoot data and voice communication cable and coax runs. This tester successfully demonstrates the link between performance, simplicity and value for industrial, commercial and residential applications.

- Tests UTP for shorts, opens, miswires, reversals, split pairs and shield continuity. Tests coax for opens and shorts.
- Measures length on UTP, STP and coax
- Tests to eight twisted pair and coax remotes
- Tone generator sends up to four different tones
- Displays test results in wiremap format
- Snap-off battery cap allows for easy battery change
- Two size kits with unshielded and shielded cables

### Original LinkMaster™ PRO Kit w/8 Remotes

Description	Cat. No.
Kit with Unshielded Jumper Cables	33-825
Kit with Shielded Jumper Cables	33-826
Replacement Large Case	H-3324

### Accessories

Description	Cat. No.
Security Kit - 8 position modular adapter and eight RJ-45 to alligator clip lead sets	LA-4157
Set of eight color-coded F-terminators	LA-4159
BNC Accessory Kit	LA-4173
RJ-45 plug to RJ-11 jack adapter (2/card)	LA-4233
RJ-45 to F-connector adapter (2/card)	LA-4234
UTP/STP remotes 2 through 8	LA-4235



### Original LinkMaster™ PRO Economy Kit

Description	Cat. No.
Kit with Unshielded Jumper Cables	33-835
Kit with Shielded Jumper Cables	33-836
Replacement Small Case	IA-4868

## NAVITEK™ Network Tester

NEW

Available Spring '04

The perfect tester for troubleshooting a structured network. Verifies cable installation in a passive network and tests network connectivity in an active one.

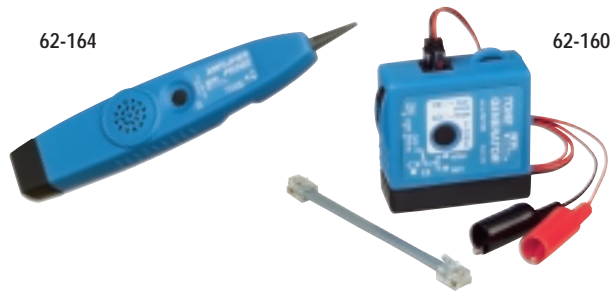


- Most useful for network installers and IT facility personnel
- Determines whether drop is active
- Identifies port services such as Ethernet, ISDN, POTS and Token Ring
- Displays Ethernet network speed and capabilities
- Pings key devices to verify connectivity
- Verifies the integrity of the physical installation through wiremap, length measurement, shield continuity and fault identification
- Measures length up to 4 tones for cable tracing
- Blinks the hub
- Snap-off battery cap for easy battery change
- Large, easy-to-read, backlit LCD display

Description	Cat. No.
Kit with 8 remotes and jumper cables	62-510



## Amplifier Probe and Tone Generator



### Amplifier Probe

- Identifies and traces wire or cables within a group
- Battery cap allows quick and easy battery replacement
- Battery low indicator

### Tone Generator

- Emits three different types of tones
- Auto-off after three hours of non-use
- Tone can be added in any status

Description	Cat. No.
Amplifier Probe	62-164
Tone Generator	62-160

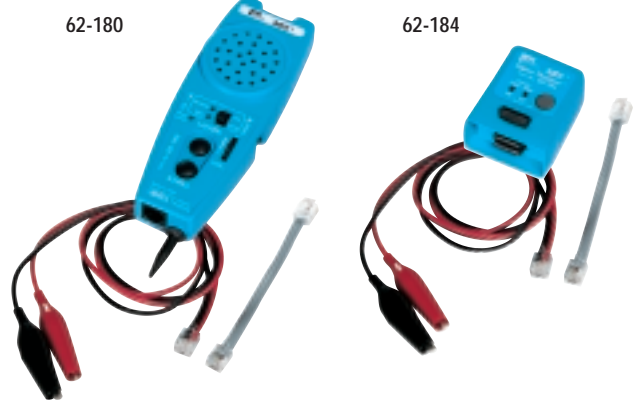
## Amplifier Probe and Tone Generator Kits



Kits include: Amplifier Probe, Tone Generator, Lead Set, Cable Assembly and flat tip

Description	Cat. No.
Kit in soft black pouch	33-864
Kit in hard gray case	33-862

## ABS™ Tester & ABS™ Signal Thrower



### ABS™ Tester

- Amplifier probe with telephone troubleshooting capabilities
- Tone TRACE feature detects tone signal
- Receives and reproduces telephone system dial tone
- Indicates call addressing for correct telephone number
- Polarity indicator tests for correct wiring and power

### ABS™ Tester and ABS™ Signal Thrower™

- Works with the ABS™ Tester to locate and identify cables
- Emits three different types of signals
- Auto-off after 3 hours of non-use

Description	Cat. No.
ABS™ Tester	62-180
ABS™ Signal Thrower™	62-184

## ABS™ Tester & ABS™ Signal Thrower Kits



Kits include: ABS™ Tester, ABS™ Signal Thrower, Lead Set and Cable Assembly

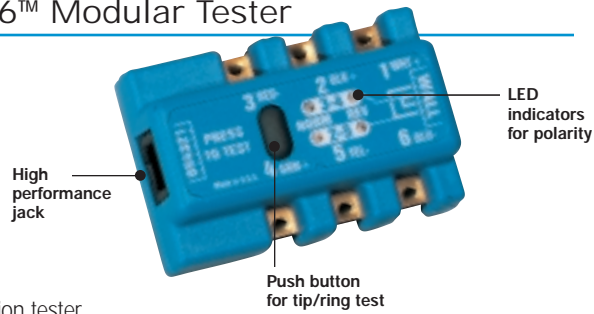
Description	Cat. No.
Kit in soft black pouch	33-854
Kit in hard gray case	33-852
Kit on blister card	62-188



## Modular Adapters

- Reverse-wired adapters for easy testing of circuits without service interruption, straight-through wiring for Data8™
- Label identifies individual conductors and pins defined with number, color and polarity identifications
- Large perforated test pads

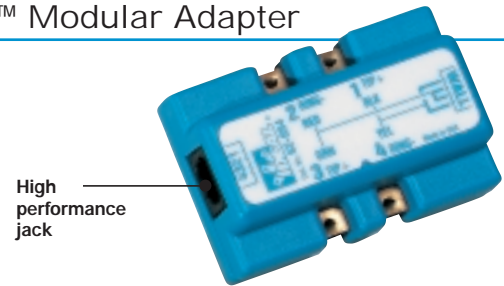
### Smart6™ Modular Tester



- 6-Position tester
- Incoming call identification

Description	Cat. No.
Smart6™ Modular Tester	62-096

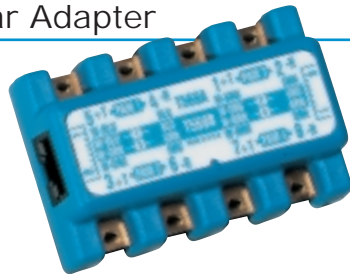
### Tele4™ Modular Adapter



- 4-Position adapter
- High-performance jacks

Description	Cat. No.
Tele4™ Modular Adapter	62-094

### Data8™ Modular Adapter



- 8-Position adapter
- High performance jacks
- Internal circuit design to reduce attenuation, coupling, NEXT

Description	Cat. No.
Data8™ Modular Adapter	62-098

## Craft TestSets

Used by installers, repair technicians and other telecommunications personnel for the installation and testing of telephone services.

- Battery-powered amplified speaker for both Talk and Monitor Modes
- 3 pre-programmed, one-touch numbers
- 10 additional memory locations, two-touch numbers
- Moisture-resistant case
- Recessed keypad prevents keypad damage and accidental button contact
- Lightweight, slim-profile design provides easy transportation and storage

### Replacement Cords

Description	Cat. No.
Leads w/Bed of Nails	62-425
Leads w/out Bed of Nails	62-427
Mod-to-Mod Cable Set	62-431
346 Cord	62-433

## Series 6



Description	Cat. No.
Craft TestSet, Model 630	62-415
Craft TestSet, Model 620	62-411
Craft TestSet, Model 610	62-410

## Model 4



Description	Cat. No.
Craft TestSet, Model 4	62-400

## Craft TestSet Selection Guide

Features	62-415 Model 630	62-411 Model 620	62-410 Model 610	62-400 Model 4
SIGNAL SHIELD™ – digital/data signal alarm	•			
DSL circuit protection	•	•		
Duplex speakerphone in Talk Mode – battery powered	•	•		
Amplified speaker in Talk Mode – battery powered	•	•	•	
Amplified speaker in Monitor Mode – battery powered	•	•	•	
Amplified speaker in Talk Mode – line powered				
Automatic timed speakers turn-off	•	•	•	
*One Touch™ memory dialing – 3 locations	•	•	•	
Repertory memory dialing – 10 locations	•	•	•	
*Safe for Data™ Monitor Mode	•	•	•	•
Monitor impedance >120K Ohms	•	•	•	•
Craft grade	•	•	•	•
Passed 12 ft. and 20 ft. drop tests	•	•	•	•
Ringer for incoming calls	•	•	•	•
Tone and pulse dialing	•	•	•	•
Last number redial – T/P	•	•	•	•
Line polarity indication	•	•	•	•
PBX pause feature	•	•	•	
Register recall/hook flash	•	•	•	•
Mute for microphone	•	•	•	•
Over-voltage/over-current protection	•	•	•	•
Moisture resistant	•	•	•	•
Non-slip rubber shoulder pad	•	•	•	•
Field changeable cordset	•	•	•	•
Belt clip	Extra Large	Extra Large	Extra Large	Standard
Warranty	1 Year	1 Year	1 Year	1 Year

## Ratchet Telemaster™



- For paired conductors
- Ratchet version of popular Telemaster™ Tool for RJ-45 and RJ-11 modular plugs
- Repeatable crimp action for consistent, high quality connections

Description	Cat. No.
Ratchet Telemaster™	30-696

## Telemaster™ Telephone Tool



- For paired conductors
- Multi-function telephone tool cuts, strips and crimps for easy one-tool application
- Steel frame for long-term durability. (Crimps primary modular plug strain relief only)

Description	Kit Cat. No.	Tool Only Cat. No.
Tool for RJ-11 (1, 2, 3 pair) and RJ-45 (4 pair) Plugs	33-700*	30-496
Tool for RJ-45 (4 pair) and DECconnect MMJ (RJ-11, 3 pair)	N/A	30-497
Tool for RJ-11 (1, 2, 3 pair) and DECconnect MMJ (RJ-11, 3 pair)	N/A	30-498
Tool for RJ-22 (handset) and RJ-11 (1, 2, 3 pair)	N/A	30-499
Replacement Cut and Strip Blade Set for Telemaster™	N/A	LB-1747

\*Kit includes 10 modular plugs each (85-351, 85-352, 85-353)

## Punch Down Tools



MADE IN THE USA

Punchmaster™ II Turn-Lock™ Tool



Non-Impact Turn-Lock™ Tool

NEW



35-407  
110/66 Blade

- For paired conductors
- Insert and cut cable terminations effortlessly
- Impact-absorbing cushioned grip reduces operator stress for high volume installers
- Adjustable high/low actuation setting accommodates termination requirements for operator preference
- Storage compartment with unique locking device provides convenient storage for spare blades
- Punchmaster™ II and Non-Impact Tool have Turn-Lock™ Style blade holding design

### Punchmaster™ II Turn-Lock™ Tools

Description	Tool Cat. No.	Repl. Blade Cat. No.
Punchmaster™ II Punch Down Tool Body only	35-483	—
Punchmaster™ II Punch Down Tool w/110 Blade	35-485	35-495
Punchmaster™ II Punch Down Tool w/66 Blade	35-487	35-497
110/66 Cut Blade only	—	35-407
Krone® Blade only	—	35-478
Bix® Blade only	—	35-479
Punch Down Tool Pouch only (fits all tools)	35-490	—

Bix® is a registered trademark of Nortel. Krone® is a registered trademark of Krone, Inc.

### Non-Impact Turn-Lock™ Style

Description	Tool Cat. No.	Repl. Blade Cat. No.
Body only	35-491	—
Tool w/110 Blade	35-492	35-495
Tool w/66 Blade	35-493	35-497

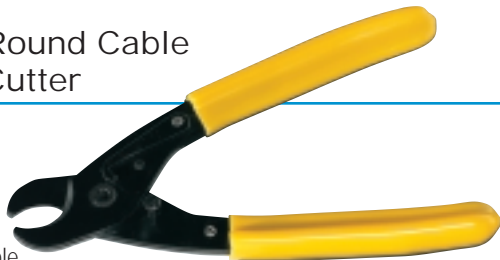
## Data T®-Cutter



- Cuts round communication cable and maintains cable geometry for better cable performance
- Cuts multi-pair cable up to .500 in. (12.7mm) and coaxial cable up to RG-9/U
- Suitable for soft cables (not ACSR)
- Steel reinforced center conductors can be trimmed with bolt cutting holes
- Locking latch keeps tool closed in pouch
- Data T®-Cutter II designed for RG-58 and RG-6 coaxial cable

Description	Cat. No.
Data T®-Cutter	45-074
Data T®-Cutter II	45-075

## Economy Round Cable and Wire Cutter



- Cuts multi-conductor cable up to .500 in. (12.7mm) and solid or stranded wire up to #8 AWG (10mm<sup>2</sup>)
- Built-in return spring, locking latch
- Stamped, hardened steel frame with curved cutting blades

Description	Cat. No.
Multi Conductor Cable to .500 in. (12.7mm) Solid or Stranded	35-051

## Center Conductor Cutter

- Trims coax center conductor to 3/16 in. (4.8mm) length for proper installation into a dual crimp coax connector



Description	Cat. No.
Center Conductor Cutter	35-060

## Lever™ -Snips Electrician's Scissors with Stripping Notches

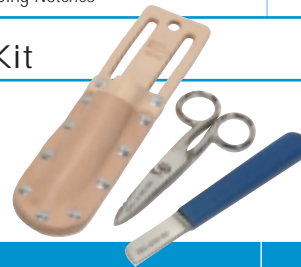
NEW



- Ergonomic design gives added leverage
- Spring-action, mechanical advantage increases stripping leverage and reduces operator fatigue
- Double plated for added rust protection
- Extra-deep serrations grips wire better

Description	Cat. No.
Electrician's Scissors with Stripping Notches	35-087

## Cable Splicing Kit



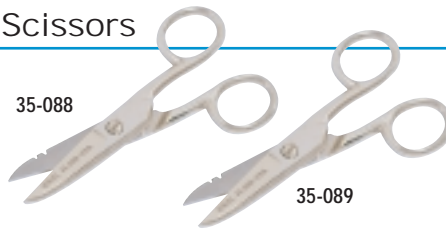
35-093

Description	Cat. No.
Cable Splicing Kit (Scissors, Splicing Knife, Leather Holder)	35-093
Leather Scissors and Knife Holder Only	35-094

## Electrician's Scissors



35-090  
Holder  
Only



35-088

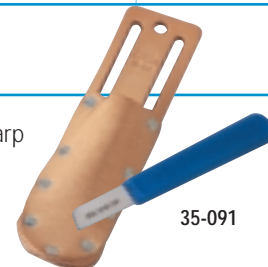
35-089

- Designed for use in telephone and electrical service applications
- Cut up to 16 gauge solid and 12 gauge stranded wire
- Serrated surface on back blade edge cleans wire
- Electrician's Scissors with stripping notches strip 19 and 23 gauge wire

Description	Cat. No.
Electrician's Scissors w/stripping notches	35-088
Electrician's Scissors	35-089
Leather Scissors Holder Only	35-090

## Cable Splicing Knife

- High carbon steel blade remains sharp and cuts easily through many insulation types
- Comfortable, full size, no slip handle for easy use



35-091

Description	Cat. No.
Cable Splicing Knife and Leather Holder	35-091
Leather Knife Holder Only	35-092

## Coax Stripmaster® Wire Strippers

- Speeds two step cable stripping
- Spring-action operation grips and strips in one motion
- Knife-type blades feature multiple hole diameters sized for two step removal of outer jacket insulation and center conductor



Description	Coax Cable Type (RGU)	Repl. Blade Cat. No.	Cat. No.
Coax Stripmaster® for RG-6	RG-6	LB-740	45-262
Coax Stripmaster® for RG-59	RG-59	LB-743	45-265
Coax Stripmaster® for RG-6 QuadShield	RG-6 QuadShield	LA-3953	45-282

## Cyclops® Data Cable Stripper

- Fast, easy removal of outer sheath insulations (PVC and Plenum types) from all Unshielded Twisted Pair (UTP), Shielded Twisted Pair (STP) and multicore cables up to .433 in. (11mm) in diameter



Description	Cat. No.
Data Cable Stripper for unshielded and shielded twisted pair cable	45-514

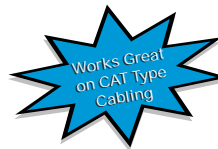
## Toggle® Coax Stripper

- Toggle® Tools for stripping Ethernet, Thinnet, RG-62 or RG-59 coax cable and other cable sizes
- Each tool does 2 or 3-step strips with no adjustment



Description	Cat. No.
Coax Stripper for RG-58	45-508
Coax Stripper for Belden® 8281®	45-509
Coax Stripper for RG-8/11U	45-510
Coax Stripper for RG-174	45-512
Coax Stripper for RG-6	45-513
Coax Stripper for RG-59	45-517

## UTP/STP/Coaxial Cable Strippers



- Lightweight, compact, cost-effective stripper is simple to operate
- Adjustable blades can be set for any depth to help ensure nick-free strips
- Use with twisted-pair wire, tightly wrapped stranded cables, CATV cable, CB antenna cable, SO, SJ, SJT, and other types of flexible power cords
- Includes three straight and one round blade

Description	Typical RG Cables	Cat. No.
Coaxial Cable Stripper, up to 1/8 in. (3.2mm) O.D.	RG-174, RG-187	45-162 (Gray)
Coaxial Cable Stripper, 1/8 in. (3.2mm) to 7/32 in. (5.556mm) O.D.	RG-58, CB Antenna Cable	45-163 (Blue)
Coaxial Cable Stripper, 1/4 in. (6.4mm) to 9/16 in. (14.3mm) O.D.	RG-8	45-164 (Blue)
Cable Stripper, 3/16 in. (4.8mm) to 5/16 in. (8mm) O.D.	RG-59, UTP Cable	45-165 (Black)
Replacement Blade Set* for 45-162, 45-163, 45-165	—	L-9225
Replacement Blade Set* for 45-164	—	L-9226

\*A set of blades consists of three straight blades and one round blade.

## Coax Strippers

- Specific adjustments needed for each cable size.



Description	Replacement Cassette	Cat. No.
Coax Stripper - 3 Step • For crimp BNC and TNC conn. • Strips braid 0.240 in. or 6mm and Dielectric 0.240 in. or 6mm	45-522 (Black)	45-520
Coax Stripper - 3 Step • For dual crimp BNC/TNC and Thinnet BNC conn. • For 735A Belden® cable • Strips braid 0.328 in. or 8.2mm and dielectric 0.109 in. or 2.7mm	45-523 (Brown)	45-521
Coax Stripper - 2 Step • For F-Type, many single crimp BNC/TNC's, Twist-on BNC/TNC's, Twinax and UHF conn. • Strips 0.250 in. or 6.35mm	45-524 (Blue)	45-526
Coax Stripper - 2 Step • For most Twinax and UHF conn. • Strips 0.480 in. or 12mm	45-525 (Green)	45-527
Coax Stripper - 3 Step • For dual crimp N-Series Ethernet conn. • Strips braid 0.240 in. or 6mm and Dielectric 0.240 in. or 6mm	—	45-528



## Round Cable Slitting and Ringing Tool



- Cuts around cable jacket as well as slits the length of jacket for easy removal
- Use with single or multiple conductor cable up to 1.75 in. O.D.
- Blade adjusts for jacket thicknesses up to .125 in.
- Spare blade in handle base

Description	Cat. No.
Round Cable Slitting and Ringing Tool	45-144
Cable Stripper for 1/4 in. to 3/4 in. O.D.	45-128
Replacement Blades for 45-144 (2/pkg.)	LB-1748
Replacement Blades for 45-128 (2/pkg.)	L-7486

## Coax Strip and Crimp Tool

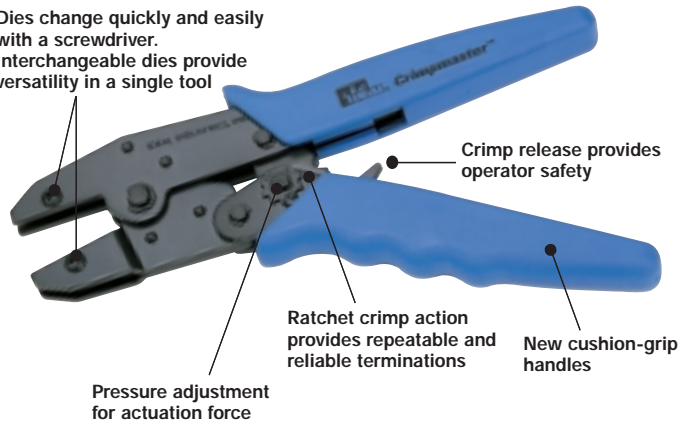


- Precision, form-ground stripping holes remove outer jacket and insulation from RG-59 and RG-6 coaxial cable
- Durable blades cut copper-coated steel conductors
- Three crimping nests for crimping F-connectors and ring terminals
- Cushioned, comfort-grip handles

Description	Cat. No.
Coax Strip & Crimp Tool	30-433

## Crimpmaster™ Crimp Tool & Die Sets

Dies change quickly and easily with a screwdriver. Interchangeable dies provide versatility in a single tool



High quality ratchet-type crimp tool for electricians, contractors and installers who require guaranteed repeatability of good mechanical and electrical connections.

### Paired Conductor Termination

Description	Tool Cat. No.	Replacement Die Set Cat. No.
Crimpmaster™ Crimp Tool Frame	30-506	—
RJ-11 Two, four, and six-position Crimp Tool for AMP RJ-11 modular plugs	30-520	30-562
RJ-45 Eight-position Crimp Tool for AMP RJ-45 modular plugs	30-521	30-560
RJ-45 Eight-position Crimp Tool for keyed or non-keyed modular plugs	30-522	30-559
RJ-45 Ten-position Crimp Tool	30-523	30-561
RJ-11 Crimp Tool for two, four or six-position modular plugs	30-524	30-556
RJ-11 Crimp Tool for DEC MMJ six-position modular plugs with an off-set release tab	30-525	30-558
Crimpmaster™ Handset Die for four-position handset modular plugs	30-526	30-565

### Coaxial Termination

Description	Tool Cat. No.	Replacement Die Set Cat. No.
22-10 AWG (.324mm <sup>2</sup> - 5.261mm <sup>2</sup> ) fully insulated slide-on connectors	30-477	30-594
Large gauge sound cable	30-478	—
Insulated Terminal Crimp Tool with built-in locator	30-479	—
22-12 AWG (.324mm <sup>2</sup> - 3.31mm <sup>2</sup> ) Non-insulated open barrel crimp style connectors	30-480	30-586
RG-58, 59, 62 Non-plenum Cambridge BNC/TNC connectors	30-481	30-573
RG-8/11, RG-213, RG-216 Ethernet Thickwire, N-Series type plugs and jacks	30-482	30-577
RG-9, Belden® 8281® and RG-6 Cable, 50 & 75 Ohm	30-483	30-578
RG-58 and RG-174 cable for 50 and 75 Ohm cables	30-484	30-587
RG-174 Mini-59 Hex BNC/TNC coax connector	30-485	30-576
RG-58 and RG-59 Plenum cables, Thinwire PVC Hex	30-486	30-591
16-26 AWG (1.31mm <sup>2</sup> - 1.28mm <sup>2</sup> ) Miniature insulated rings and splices	30-487	30-572
AMP DEC RG-58 Thinwire connectors	30-488	30-588
SMA or SFR-Type fiber optic connectors	30-490	30-597
22-10 AWG (.324mm <sup>2</sup> - 5.261mm <sup>2</sup> ) Insulated ring tongue terminals and splices	30-500	30-579
22-8 AWG (.3mm <sup>2</sup> - 8mm <sup>2</sup> ) Non-insulated terminals and splices	30-501	30-580
RG-58 RG-59/62AU BNC/TNC 3-Piece Hex type connectors	30-502	30-581
CATV RG-59 and RG-6 Captive Ring F-connectors	30-503	30-582
SMA or SFR-Type Hex fiber optic connectors	30-489	30-596

## UniSeal™ Compression Tool

**NEW**



- Connects RG-6, RG-6 Quad Shield and RG-59 compression connectors on coaxial cable
- Fast and reliable solution to home theater, CATV, satellite systems and security applications
- Permanent connection so your connector never comes loose
- Universal design works with most compression connectors

Description	Cat. No.
UniSeal™ Compression Tool	30-603

## Compression F-Connectors

- Approved for use by most cable TV and satellite companies
- RF signal containment ensures strong signal
- Permanent connections do not pull off or come loose
- Provides superior durability in all climates compared to other manufacturers' connectors
- One-piece design for quick installation
- Compression port seal provides a water-tight seal for outdoor applications



**NEW**



Description	Qty.	Cat. No.
RG-6 Compression F-connector	50	89-055
RG-6 Compression F-connector	100	89-105
RG-6 Quad Compression F-connector	50	89-056
RG-6 Quad Compression F-connector	100	89-106
RG-59 Compression F-connector	50	89-054
RG-59 Compression F-connector	100	89-104

## Compression F-Connector Port Seal

- For use with IDEAL RG6, RG-6 Quad and RG-59 F-Style compression connectors to make connections water tight.



**NEW**

Description	Qty.	Cat. No.
Port Seal	5	89-026

## RJ-45/11 Two, Four, Six and Eight-Position Combination TelCom Termination Kit



**Kit 33-704 Includes:**

Description	Qty.	Cat. No.
Telemaster™ for RJ-11/RJ-45 Plugs	1	30-496
4-Position, RJ-11 Stranded Modular Plugs	15	85-351
6-Position, RJ-11 Stranded Modular Plugs	15	85-352
8-Position, RJ-45 Stranded Modular Plugs	15	85-353

## Economy 10Base-T Kit



**Kit 33-750 Includes:**

Description	Qty.	Cat. No.
UTP/Coax Stripper	1	45-165
Telemaster™ RJ-11/RJ-45 Tool	1	30-496
8-Position RJ-45 Non-keyed Solid Plugs	50	85-346

## Crimpmaster™ 10Base-T RJ-45 Crimping Kit

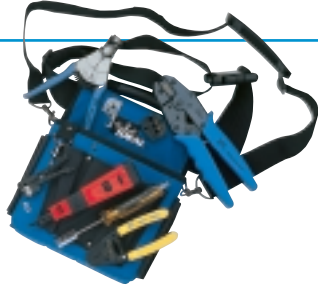


**Kit 33-652 Includes:**

Description	Qty.	Cat. No.
Data T <sup>®</sup> -Cutter	1	45-074
UTP/Coax Stripper	1	45-165
Crimpmaster™ Frame only	1	30-506
8-Position Die Set for RJ-45 Plugs	1	30-559
8-Position RJ-45 Non-Keyed Solid Plugs	200	86-396

## Residential Kit

33-905



### Kit 33-905 Includes:

Description	Qty.	Cat. No
Data T <sup>®</sup> -Cutter	1	45-074
UTP Stripper	1	45-165
Punchmaster™ w/110 Blade	1	35-485
Crimpmaster™ RJ-45	1	30-522
CATV Die Set	1	30-582
Stripmaster <sup>®</sup> RG-6	1	45-262
RG-6 Quad Shield Stripmaster <sup>®</sup> Blade	1	LA-3953
F-Connector Tool	1	35-046
Journeyman's Pouch	1	35-462

## Pro Residential Kit

33-925



### Kit 33-925 Includes:

Description	Qty.	Cat. No
Journeyman's Pouch	1	35-462
Punchmaster™	1	35-483
110/66 Blade	1	35-407
UTP Stripper	1	45-165
5-in-1 Screwdriver	1	35-905
Probe Pic	1	35-473
Lever™-Snips	1	35-087
Data T <sup>®</sup> -Cutter	1	45-074
Coax Stripper	1	45-524
F-Connector Tool	1	35-046
Tone Generator	1	62-160
Amplifier	1	62-164
CATV Crimpmaster™	1	30-503
RJ-45 Die Set	1	30-559

## Cable Service Kit

33-605



### Kit 33-605 Includes:

Description	Qty.	Cat. No
Punchmaster™ w/110 Blade	1	35-485
66 Blade Only	1	35-497
Electrician's Scissors w/Stripping Notches	1	35-088
UTP/STP Stripper	1	45-165
5-in-1 Screwdriver	1	35-905
Probe Pic & Spudger	1	35-473
Tone Generator	1	62-160
Amplifier Probe	1	62-164
Journeyman's Electrician's Tote	1	35-462

## Deluxe Cable Service Kit

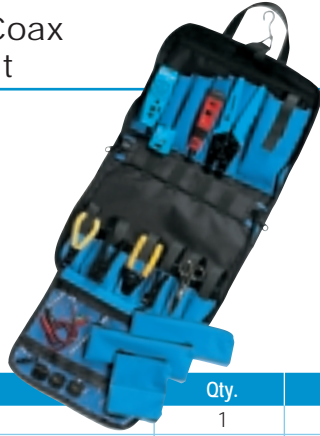
33-705



### Kit 33-705 Includes:

Description	Qty.	Cat. No
Punchmaster™ w/110 Blade	1	35-485
66 Blade Only	1	35-497
Electrician's Scissors w/Stripping Notches	1	35-088
UTP/STP Stripper	1	45-165
5-in-1 Screwdriver	1	35-905
Probe Pic & Spudger	1	35-473
Tone Generator	1	62-160
Amplifier Probe	1	62-164
Journeyman's Electrician's Tote	1	35-462
Telemaster™ Tool	1	30-496
LinkMaster™ Tester and Remote	1	62-200

## Twisted Pair/Coax Termination Kit



### Kit 33-869 Includes:

Description	Qty.	Cat. No
Data T <sup>®</sup> -Cutter	1	45-074
Scissors w/stripping notch	1	35-088
Center Conductor Cutter	1	35-060
UTP/Coax Stripper	1	45-165
Coax Stripper w/black cassette	1	45-520
Crimpmaster™ Frame only	1	30-506
2,4,6-Position Die Set for RJ-11 Plugs	1	30-556
8-Position Die Set for RJ-45 Plugs	1	30-559
RG-58/59/62 BNC Die Set	1	30-581
Punchmaster™ II w/110 Blade	1	35-485
Punchmaster™ II 66 Blade only	1	35-497
ABS™ Signal Thrower™	1	62-184
ABS™ Tester	1	62-180
ZipKit™ Carrying Case	1	35-419

## Twisted Pair/Coax Termination Kit



### Kit 33-806 Includes:

Description	Qty.	Cat. No
Tele T <sup>®</sup> -Stripper	1	45-076
Data T <sup>®</sup> -Cutter	1	45-074
UTP/Coax Stripper	1	45-165
Coax Cable Stripper w/black cassette	1	45-520
Coax Stripper w/red cassette	1	45-528
Replacement Cassette, brown	1	45-523
Crimpmaster™ Frame only	1	30-506
RG-8/11 Ethernet Die Set	1	30-577
Thinnet BNC Die Set	1	30-588
RG-58/59/62 BNC Die Set	1	30-581
2,4,6-Position Die Set for RJ-11 Plugs	1	30-556
8-Position Die Set for RJ-45 Plugs	1	30-559
6-Position DEC MMJ Die Set for RJ-11 Plugs	1	30-558
8-Position Die Set for RJ-45, AMP Plugs	1	30-560
Punchmaster™ II Punch Down Tool w/66 Blade	1	35-487
Punchmaster™ II 110 Blade only	1	35-495

## Crimpmaster™ F-Type (CATV) Connectors Kits



### Kit 33-400 Includes:

Description	Qty.	Cat. No
Crimpmaster™ CATV	1	30-503
F-Connector, Crimp-on RG-59 Plug	20	85-016
F-Connector, Crimp-on RG-6 Plug	20	85-017

## RG-6 Crimpmaster™ F-Type Connector Kit

**NEW**

### Kit 33-404 Includes:

Description	Qty.	Cat. No
CATV Crimpmaster™	1	30-503
F-Connector, Crimp-on RG-6	20	85-017
F-Connector, Crimp-on RG-6 Quad Shield	20	85-057

## Twist-On F-Connector Kit



### Kit 33-401 Includes:

Description	Qty.	Cat. No
Coax Stripper w/blue cassette	1	45-526
F-Connector, Twist-on RG-59 Plug	20	85-015

## Technician's Service Kit



**Now includes 5-in-1 Screwdriver**

### Kit 33-505 Includes:

Description	Qty.	Cat. No
Punchmaster™ II Punch Down Tool w/110 Blade	1	35-485
Punchmaster™ II 66 Blade only	1	35-497
Electrician's Scissors w/stripping notch	1	35-088
UTP/STP Stripper	1	45-165
5-in-1 Screwdriver	1	35-905
Probe Pick and Spudger	1	35-473
Nylon case	1	62-205



## Crimpmaster™ CATV F-Connector Termination Kit



### Kit 33-402 Includes:

Description	Qty.	Cat. No
Coax Stripper w/blue cassette	1	45-526
Crimpmaster™ for RG-59/62 CATV F-Connectors	1	30-503
F-Series, Crimp-on RG-59 Plugs	20	85-016
F-Series, Crimp-on RG-6 Plugs	20	85-017

## RG-6 Crimpmaster™ F-Type Connector Termination Kit



### Kit 33-406 Includes:

Description	Qty.	Cat. No
CATV Crimpmaster™	1	30-503
F-Connector, Crimp-on RG-6	20	85-017
F-Connector, Crimp-on RG-6 Quad Shield	20	85-057
Coax Stripper with Blue Cassette	1	45-526
F-Connector Tool	1	35-046
Mechanic's Bag	1	35-535

## Deluxe Crimpmaster™ Coaxial Crimping Kit



### Kit 33-201 Includes:

Description	Qty.	Cat. No
Coax Stripper w/black cassette	1	45-520
Replacement Cassette, brown	1	45-523
Crimpmaster™ Frame only	1	30-506
RG-8/11 Ethernet Die Set	1	30-577
RG-59/8281 BNC Die Set	1	30-578
RG-58, RG-59/62 BNC Die Set	1	30-581
RG-58/174 BNC Die Set	1	30-587
Thinwire BNC Die Set	1	30-588
RG-58/59 Plenum Die Set	1	30-591

## Cable Service/Termination Kit



### Kit 33-861 Includes:

Description	Qty.	Cat. No
Data T®-Cutter	1	45-074
Center Conductor Cutter	1	35-060
UTP/Coax Stripper	1	45-165
Coax Stripper w/black cassette	1	45-520
Crimpmaster™ RG-58/59 Tool	1	30-502
2,4,6-Position Die Set for RJ-11 Plugs	1	30-556
8-Position Die Set for RJ-45 Plugs	1	30-559
Punchmaster™ II Punch Down Tool w/66 Blade	1	35-487
Punchmaster™ II 110 Blade only	1	35-495
ABS™ Signal Thrower™	1	62-184
ABS™ Tester	1	62-180
LinkMaster™ Tester w/Remote	1	62-200
Cable Assemblies	1	K-7921



## Wall Plates

















85-205

85-220

85-218

Telephone Wall Plates are listed and approved by the Underwriter's Laboratories and contain 50 micro inches of gold plating on the contacts.

### Telephone Wall Plates - Standard Size

Description	Color	Qty.	Cat. No.
RJ-11, 2 Pair  	Ivory	Card of 1	85-206
		Box of 100	86-206
	White	Card of 1	85-207
		Box of 100	86-207
	Almond	Card of 1	85-223
		Box of 100	86-223
Dual RJ-11, 2 Pair  	Ivory	Card of 1	85-208
		Box of 100	86-208
	White	Card of 1	85-209
		Box of 100	86-209
	Ivory	Card of 1	85-210
		Box of 100	86-210
RJ-11, 3 Pair  	White	Card of 1	85-211
		Box of 100	86-211
	Almond	Card of 1	85-225
		Box of 100	86-225
	Ivory	Card of 1	85-212
		Box of 100	86-212
Dual RJ-11, 3 Pair  	Ivory	Card of 1	85-213
		Box of 100	86-213
	White	Card of 1	85-214
		Box of 100	86-214
	Ivory	Card of 1	85-215
		Box of 100	86-215
RJ-45, 4 Pair  	White	Card of 1	85-227
		Box of 100	86-227
	Almond	Card of 1	85-216
		Box of 100	86-216
	Ivory	Card of 1	85-217
		Box of 100	86-217
Dual RJ-45, 4 Pair  	Ivory	Card of 1	85-218
		Box of 100	86-218
	White	Card of 1	85-219
		Box of 100	86-219
	Almond	Card of 1	85-229
		Box of 100	86-229
RJ-11, 2 Pair Wall Mount Plate  	Ivory	Card of 1	85-200
		Box of 100	86-200
	White	Card of 1	85-201
		Box of 100	86-201
	Almond	Card of 1	85-220
		Box of 100	86-220
CATV Coax	Ivory	Card of 1	85-202
		Box of 100	86-202
	White	Card of 1	85-203
		Box of 100	86-203
	Almond	Card of 1	85-221
		Box of 100	86-221
Dual CATV Coax	Ivory	Card of 1	85-204
		Box of 100	86-204
	White	Card of 1	85-205
		Box of 100	86-205
	Almond	Card of 1	85-222
		Box of 100	86-222

## Wall Plates





85-239

85-237

85-232

### Telephone Wall Plates — Mid-Size

Description	Color	Qty.	Cat. No.
RJ-11, 2 Pair  	Ivory	Card of 1	85-242
		Box of 100	86-242
	White	Card of 1	85-237
		Box of 100	86-237
	Almond	Card of 1	85-233
		Box of 100	86-233
Combo CATV/RJ11	Ivory	Card of 1	85-241
		Box of 100	86-241
	White	Card of 1	85-236
		Box of 100	86-236
	Almond	Card of 1	85-232
		Box of 100	86-232
CATV Coax	Ivory	Card of 1	85-239
		Box of 100	86-239
	White	Card of 1	85-234
		Box of 100	86-234
	Almond	Card of 1	85-230
		Box of 100	86-230
Dual CATV Coax	Ivory	Card of 1	85-240
		Box of 100	86-240
	White	Card of 1	85-235
		Box of 100	86-235
	Almond	Card of 1	85-231
		Box of 100	86-231

## Surface Jack



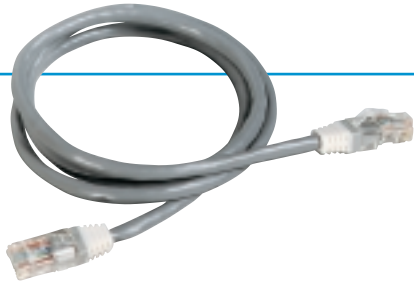
For initial installations where cable cannot be pulled through wall, or for replacement of modular four-prong jacks.

### Surface Jacks

Description	Color	Qty.	Cat. No.
RJ-11, 2 Pair	White	Card of 1	85-244
RJ-11, 2 Pair	Ivory	Card of 1	85-245
RJ-11, 2 Pair	Almond	Card of 1	85-246



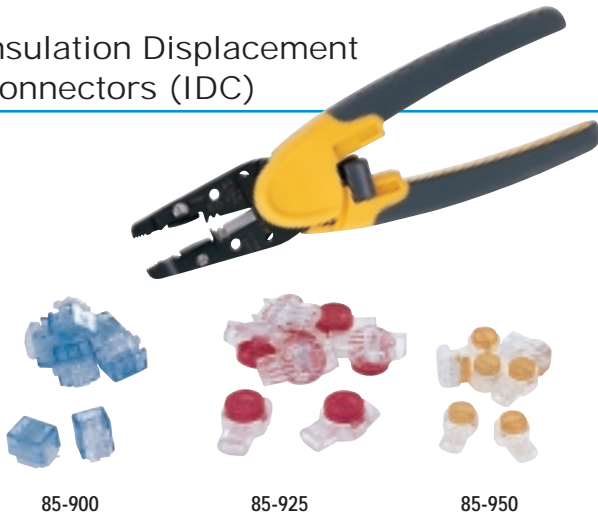
## Patch Cables



- 350 MHz UTP Patch Cables provide quick and easy interconnection for system additions, moves or changes
- Slim, contoured boots provide strain relief and save space on over-crowded patch panels
- Snagless modular connectors
- Terminated to 568B wiring and color code configurations, with 24 AWG stranded copper conductors
- Five colors and six lengths for installation versatility

Description	Gray Cat. No.	Blue Cat. No.	Black Cat. No.	Yellow Cat. No.	Red Cat. No.
3 ft. (1m)	85-731	85-737	85-743	85-749	85-755
5 ft. (1.5m)	85-732	85-738	85-744	85-750	85-756
7 ft. (2.1m)	85-733	85-739	85-745	85-751	85-757
10 ft. (3m)	85-734	85-740	85-746	85-752	85-758
15 ft. (4.5m)	85-735	85-741	85-747	85-753	85-759
25 ft. (7.6m)	85-736	85-742	85-748	85-754	85-760

## Insulation Displacement Connectors (IDC)



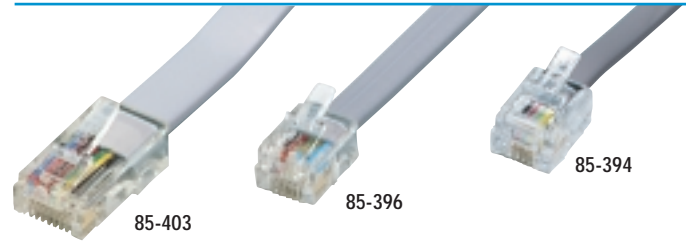
IDC connectors create fast splice and tap connections on solid copper wires. Designed for low voltage telecommunication cables.

- Moisture-resistant sealant protects wires from corrosion
- Use with solid copper single-conductor wire

Description	Qty.	Cat. No.
UB-I, 2-Wire Tap Splice IDC, 22-26 AWG	25	85-900
	100	86-900
UR-I, 3-Wire Butt Splice IDC, 19-26 AWG	25	85-925
	100	86-925
UY-I, 2-Wire Butt Splice IDC, 22-26 AWG	25	85-950
	100	86-950
Kinetic Super™ Wire Stripper/Crimper	1	45-719

See page C-3 for IDC Crimp Tool.

## TelCom Modular Plugs



- All plugs comply with FCC 68 guidelines and are UL Listed
- Plugs are capable of supporting the latest EIA/TIA cable system performance categories when installed in compliance with appropriate EIA/TIA standards and methods
- Plugs offered for round cable with solid conductors and for flat cable and stranded conductors
- Position and contact configurations cover popular styles

Description	Qty.	Cat. No.
6-Position 4-Contact Flat Stranded	25	85-351
	50	85-401
	100	86-401
6-Position 6-Contact Flat Stranded	25	85-352
	50	85-402
	100	86-402
6-Position 6-Contact DEC Flat Stranded	25	85-349
	50	85-399
	100	86-399
4-Position 4-Contact Flat Stranded (Handset)	25	85-348
	50	85-398
	100	86-398
8-Position 8-Contact Flat Stranded	25	85-353
	50	85-403
	100	86-403
8-Position 8-Contact Keyed Flat Stranded	25	85-347
	50	85-397
	100	86-397
6-Position 4-Contact Round Solid	25	85-344
	50	85-394
	100	86-394
6-Position 6-Contact Round Solid	25	85-345
	50	85-395
	100	86-395
6-Position 6-Contact DEC Round Solid	25	85-343
	50	85-393
	100	86-393
4-Position 4-Contact Round Solid (Handset)	25	85-342
	50	85-392
	100	86-392
8-Position 8-Contact Round Solid	25	85-346
	50	85-396
	100	86-396
8-Position 8-Contact Keyed Round Solid	25	85-341
	50	85-391
	100	86-391

For a complete selection of BNC connectors, see the IDEAL DataComm Catalog.

## F-Series Coaxial Connectors

F-Series Connectors utilize threaded couplings and cable conductors as contacts for CATV and other UHF applications.

	Description	Quantity	Cat. No.
	F-Series, Twist-on Plug, RG-59	Card of 10	<b>85-035</b>
		Card of 50	<b>85-015</b>
		Box of 100	<b>86-015</b>
	F-Series, Crimp Plug, RG-59	Card of 10	<b>85-036</b>
		Card of 50	<b>85-016</b>
		Box of 100	<b>86-016</b>
	F-Series, Crimp Plug, RG-6	Card of 10	<b>85-037</b>
		Card of 50	<b>85-017</b>
		Box of 100	<b>86-017</b>
	F-Series, 2-Piece Crimp Plug, RG-59	Card of 50	<b>85-027</b>
		Box of 200	<b>86-027</b>
	F-Series, 2-Piece Crimp Plug, RG-6	Card of 50	<b>85-028</b>
Box of 200		<b>86-028</b>	
	F-Series, Crimp Plug, RG-59, Quad Shield	Card of 10	<b>85-059</b>
		Card of 50	<b>85-029</b>
		Box of 100	<b>86-029</b>
	F-Series, Crimp Plug, RG-6, Quad Shield	Card of 10	<b>85-057</b>
		Card of 50	<b>85-030</b>
		Box of 100	<b>86-030</b>
	F-Series, Female Adapter	Card of 10	<b>85-031</b>
		Box of 100	<b>86-031</b>
	F-Series, Terminator	Card of 10	<b>85-038</b>
		Box of 100	<b>86-038</b>
	F-Type, Twist-on RG-6	Card of 10	<b>85-053</b>
		Card of 50	<b>85-039</b>
		Box of 100	<b>86-039</b>
	F-Type, 1 pc Crimp, RG-59 Plenum	Card of 50	<b>85-040</b>
		Box of 100	<b>86-040</b>

## Compression F-Connector Port Seal

For use with IDEAL RG-6, RG-6 Quad and RG-59 F-style compression connectors to make connection water tight.



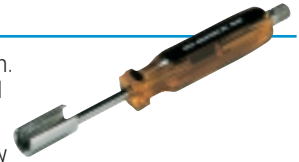
Description	Qty.	Cat. No.
Compression F-Connector Port Seal	5	<b>89-026</b>
UniSeal™ Compression Tool		<b>30-603</b>

## Splitters

	Description	Quantity	Cat. No.
	CATV Cable Splitter, 5-900 MHz, 2-Way	Card of 1	<b>85-032</b>
		Box of 10	<b>86-432</b>
	CATV Cable Splitter, 5-900 MHz, 3-Way	Card of 1	<b>85-033</b>
		Box of 10	<b>86-433</b>
	CATV Cable Splitter, 5-900 MHz, 4-Way	Card of 1	<b>85-034</b>
		Box of 10	<b>86-434</b>
	High Performance Cable Splitter, 5MHz-1GHz 2-Way	Card of 1	<b>85-132</b>
		Box of 10	<b>86-132</b>
	High Performance Cable Splitter, 5MHz-1GHz 3-Way	Card of 1	<b>85-133</b>
		Box of 10	<b>86-133</b>
	High Performance Cable Splitter, 5MHz-1GHz 4-Way	Card of 1	<b>85-134</b>
		Box of 10	<b>86-134</b>

## F-Connector Tool

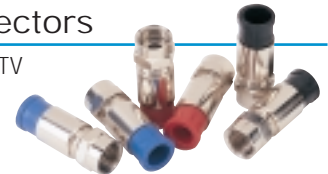
- Two tools in one, combines a 7/16 in. hex socket and 3/8-32 threaded end
- Hex socket makes installation and removal of CATV F-connections easy
- Threaded-end holds F-connector during cable insertion to ease connector seating against dielectric and eliminates chance of injury from cable center conductor
- Chrome finish for long life and screwdriver-type plastic handle for comfort



Description	Cat. No.
F-Connector Tool	<b>35-046</b>

## Compression F-Connectors

- Approved for use by most cable TV and satellite companies
- RF signal containment ensures strong signal
- Permanent connections do not pull off or come loose
- Provides superior durability in all climates compared to other manufacturers' connectors
- One-piece design for quick installation
- Compression port seal provides a water-tight seal for outdoor applications



Description	Qty.	Cat. No.
RG-6 Compression F-connector	50	<b>89-055</b>
	100	<b>89-105</b>
RG-6 Quad Compression F-connector	50	<b>89-056</b>
	100	<b>89-106</b>
RG-59 Compression F-connector	50	<b>89-054</b>
	100	<b>89-104</b>



## Simplex/Duplex 3mm Jacket Stripper

**NEW**



- Designed to remove the jacket from 3mm Simplex or Duplex (zip cord) fiber optic cable
- Form-ground, knife-type blades for accurate easy stripping without damaging the fiber or Kevlar® strength member
- Contoured, comfort-grip handles to reduce operator fatigue

Description	Cat. No.
Simplex/Duplex 3mm Jacket Stripper	45-349

Note: Kevlar® is a registered trademark of DuPont. ST® is a registered trademark of AT&T.

## Stripmaster® Ribbon Fiber Jacket Stripper

**NEW**



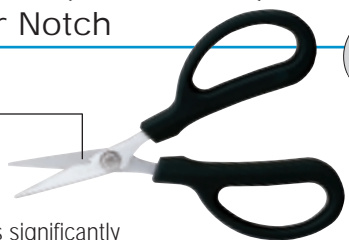
- Removes jacket from Ribbon Fiber without damage to the Kevlar® strength member of the Ribbon Fiber

Note: Frame and blade-set sold separately.

Description	Cat. No.
Stripmaster® Frame only	L-5620
Blade-set for use with Corning Plenum and Riser Ribbon Fiber Cable	LB-1152
Blade-set for use with Corning "Fanout" Ribbon Cable	LB-1153

Note: Kevlar® is a registered trademark of DuPont.

## Serrated Cutter (For Kevlar®) with Breaker Notch



**IMPROVED NEW IMPROVED**

- Two-Step process significantly increases the life of this rugged tool
- Superior quality high-carbon stainless steel with molybdenum and vanadium provides the super-hard edges needed to stand up to the demands of today's market
- Textured cushioned-grip handles
- Value-priced for contractors, cable assembly houses, fiber installers/technicians and tool kits

Description	Cat. No.
Serrated Cutter w/Breaker Notch (Patent pending)	45-344

Note: Kevlar® is a registered trademark of DuPont.

## MiniLite-Strip™ Optical Fiber Stripper

**IMPROVED NEW IMPROVED**

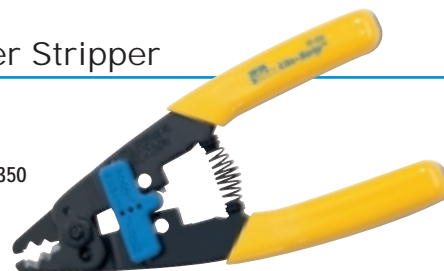


- Small strip notch engineered and precision-ground to strip 900 micron or 250 micron buffer coatings from 125 micron fiber
- Larger round strip notch machined to remove the 3mm outer jacket
- Strip notches pre-set and locked, no field adjustment necessary

Description	Cat. No.
MiniLite-Strip™ Optical Fiber Stripper	45-352

## Lite-Strip™ Optical Fiber Stripper

45-350



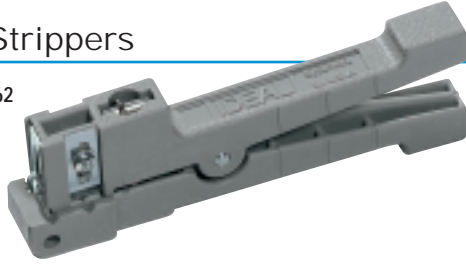
V-notch blades strip a wide range of outer cable jacket. Precision-ground, replaceable knife-type blades strip tight buffer tube insulations (900µm). Also strips mechanically strippable coatings from 250 microns to 900 microns.

- Replaceable precision-ground blades cleanly strip buffer coatings
- New funneled hole makes cable insertion easier
- Improved spring mounting returns handles to original position after every application
- One-step, 900 micron stripping hole provides broader stripping range
- Extra durable to withstand normal drops without requiring tool realignment
- New gauge color makes fiber and hole identification easier
- Improved comfort-grip handles for an easier, more comfortable stripping process

Description	Fiber Sizes	Cat. No.
Lite-Strip™ Optical Fiber Stripper (900µm/250µm)	125µm, 140µm	45-350
Transparent Wire Stop		LB-070

## Cable Strippers

45-162



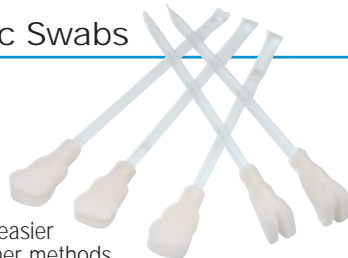
This lightweight, compact stripper is inexpensive and simple to operate.

- Adjustable blades can be set for any depth to help ensure nick-free strips
- Use with twisted-pair wire, tightly wrapped stranded cables, CATV cable, CB antenna cable, SO, SJ, SJT, and other types of flexible power cords
- Includes three straight and one round blade

Description	Cat. No.
Cable Stripper, up to 1/8 in. (3.2 mm) O.D.	45-162 (Gray)
Cable Stripper, 1/8 in. (3.2 mm) to 7/32 in. (5.556 mm) O.D.	45-163 (Blue)
Replacement Blade Set for 45-162, 45-163, 45-165	L-9225

## Split-Tip Fiber Optic Swabs

NEW



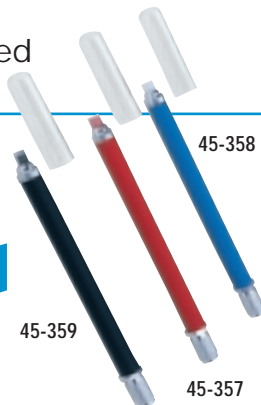
- Split-tip design cleans fiber easier and more efficiently than other methods
- Tube/handle is pre-loaded with 99% isopropyl alcohol
- A single swab can be used for many cleanings or until the alcohol is gone

Description	Qty.	Cat. No.
Split-Tip Fiber Optic Swabs	20/bag	45-360

## DualScribe™ Double-Ended Fiber Optic Scribes

- Three professional quality blade styles to choose from to meet your specific needs – Ruby, Sapphire, Carbide
- Color-coded handles for quick, easy identification  
Red – Ruby  
Blue – Sapphire  
Black – Carbide
- 30° single bevel – DualScribe™ reversible blade doubles tool life
- Soft non-slip grip provides precise control during scribing
- Clear safety cap protects the blades from damage when not in use

NEW



Description	Handle Color	Cat. No.
Ruby Blade Fiber Optic Scribe	Red	45-357
Sapphire Blade Fiber Optic Scribe	Blue	45-358
Carbide Blade Fiber Optic Scribe	Black	45-359

## Plastic Polishing Fixture

NEW



- Universal fitting accepts all ST, SC and FC connectors with 2.5mm ferrules
- Economically priced
- Grooved face for polishing efficiency
- Precision tool used by manufacturers, contractors and in tool kits

Description	Cat. No.
Plastic Polishing Fixture	45-342

## Stainless Steel Polishing Fixture for Optical Fiber ST® and SC Type Connectors



Produces polished fiber optic ST® and SC type connectors for optimum connector performance.

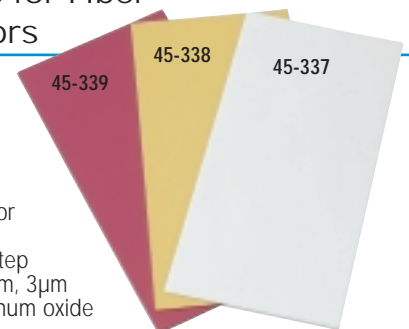
- Precision-machined, stainless-steel disk provides accurate polishing angle for desired end face finish
- Stainless-steel hardness maintains long life and resists uneven wear
- Stepped surface reduces drag and friction for easier polishing

Description	Quantity	Cat. No.
Polishing Fixture for Optical Fiber SC/ST® Type Connectors	1	45-341

Note: ST® is a registered trademark of AT&T.

## Polishing Films for Fiber Optic Connectors

NEW



- For optimum connector polishing results, we recommend a three-step procedure using 0.5µm, 3µm and 12µm 3x6" aluminum oxide polishing films
- Lot-to-lot consistency in our films means repeatable connector finishes on ceramic, stainless steel, plastic and composite ferrules
- A single sheet will typically yield 10 to 20 connectors when using the recommended 3-step procedure

Description	Color	Quantity	Cat. No.
0.5µm, 3" x 6", Aluminum Oxide	Ivory	20 films/sleeve	45-337
3.0µm, 3" x 6", Aluminum Oxide	Lt. Yellow	20 films/sleeve	45-338
12µm, 3" x 6", Aluminum Oxide	Lt. Red	20 films/sleeve	45-339



## Fiber Inspection Microscope

45-332



**NEW**

- 100X magnification for viewing multimode connectors
- Includes 2.5mm connector "Universal Adapter" for FC, ST and SC style connectors
- Oblique illumination provides excellent view of ferrule cleanliness and core condition
- Rugged, rubberized metal housing, precision glass optics and a built-in laser safety filter
- White LED illumination delivers 100,000 hours bulb life
- Soft padded carrying case included
- Battery life 48+ hours
- Compact size 7.5" x 1.96" x 1.18"
- Optional 200X Conversion Eyepiece threads on for viewing finish/polish of singlemode connectors

Description	Cat. No.
Fiber Inspection Microscope	45-332
1.25mm Connector Adapter	45-334
MTRJ-Style Connector Adapter	45-335
200X Conversion Eyepiece for Singlemode Connectors	45-336

## VFF5 Visual Fault Finder

**NEW**



Laser light source used to locate breaks, faulty splices and crimps

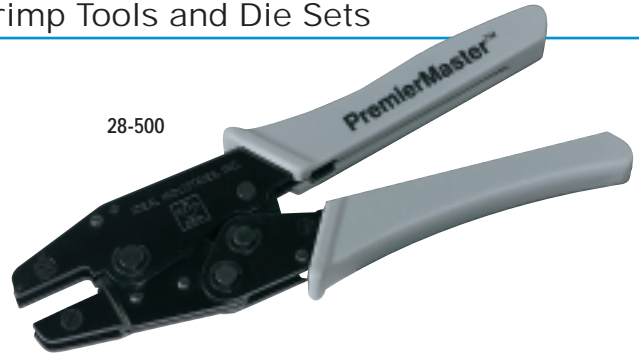
- **NEW** 2.5mm Universal Adapter for all ST, SC and FC connectors
- Useful over a distance of 5km (3miles)
- Two AA batteries provide over 30 hours of continuous use
- Slim, pocket-sized tool in rugged metal housing
- Nylon carrying case with belt loop included.

Description	Cat. No.
Visual Fault Finder	VFF5

Note: ST® is a registered trademark of AT&T.

## PremierMaster™ Crimp Tools and Die Sets

28-500



Fiber Optic Crimp Die Sets were developed to be used in IDEAL PremierMaster™ Series Crimp Frame.

Description	Tool Cat. No.	Repl. Die Set Cat. No.
PremierMaster™ Crimp Tool Frame Only	28-500	—
AT&T/ST or SMA Fiber Optic conn. Hex 0.190 (4.83 mm), 0.090 (2.29 mm) Round, 0.105 (2.67 mm)	28-301	28-401
Amphenol SMA Fiber Optic Conn. Hex 0.213 (5.54 mm), 0.178 (4.52 mm)	—	28-402
Amphenol SMA Fiber Optic conn. Hex 0.218 (5.54 mm), 0.151 (3.84 mm)	—	28-403
3M/ST Fiber Optic conn. Hex 0.153 (3.88 mm)	28-304	28-404
Fiber Optic conn. Hex 0.151 (3.84 mm), 0.178 (4.52 mm), 0.213 (5.41 mm)	28-305	28-405

Note: PremierMaster™ Die Sets not interchangeable with Crimpmaster™ frames.

## Crimpmaster™ Fiber Optic Crimp Tools

30-489



Cat. No. 30-489 Fiber Optic Crimp Tool for SMA hex connectors. Triple hex cavity die for crimp dimensions of .151 (3.84 mm), .178 (4.52 mm) and .213(5.41 mm).

Cat. No. 30-4910 AMP-Optimate Fiber Optic Crimp Tool for SMA connectors. A triple cavity 360 degrees round die is incorporated in this tool for crimp dimensions of .195 (4.95 mm), .165 (4.19 mm) and .138 (3.51 mm).

Description	Cat. No.
Crimpmaster™ for SMA Hex Connectors	30-489
Replacement Die Set	30-596
Crimpmaster™ for SMA Connectors and AMP Optimate	30-490
Replacement Die Set for AMP-Optimate-SMA	30-597



## Standard and Heavy-Duty Toggle Switches

- Great for power tool and motor control switch applications
- Rugged long wearing solid brass/nickel plated bushings
- 1/2 in. diameter mounting hole



Description	Poles	Circuitry	Termination	Cat. No.
Toggle Switch with on-off faceplate	SPST	On-Off	Screw	<b>774011*</b>
Toggle Switch	SPST	On-Off	"O" Ring & Screw	<b>774010*</b>
Toggle Switch	SPST	On-Off	Spade	<b>774008*</b>
Toggle Switch	SPDT	On-On	Screw	<b>774012*</b>
Toggle Switch	SPDT	On-Off-On	Screw	<b>774013*</b>
Toggle Switch	SPDT	On-Off-On	Spade	<b>774027*</b>
Toggle Switch	SPDT	(On)-Off-(On)	Screw	<b>774009*</b>
Heavy-Duty Toggle Switch	DPST	On-Off	Screw	<b>774014**</b>
Heavy-Duty Toggle Switch	DPST	On-Off	Spade	<b>774005**</b>
Heavy-Duty Toggle Switch	DPDT	On-On	Screw	<b>774015**</b>
Heavy-Duty Toggle Switch	DPDT	On-Off-On	Screw	<b>774016**</b>
Heavy-Duty Toggle Switch	DPDT	On-Off-On	Spade	<b>774003**</b>
Heavy-Duty Toggle Switch	DPDT	(On)-Off-(On)	Screw	<b>774000**</b>

\* 3/4 HP 125-277V AC, 10 Amp/277V AC, 20 Amp/125V AC  
 \*\* 1-1/2 HP 125-277V AC, 10 Amp/277V AC, 20 Amp/125V AC

## Double Insulated Plastic Toggle Switches

- Great for outdoor, marine and automotive applications
- Double insulated for moisture protection
- 1/2 in. diameter mounting hole



Description	Poles	Circuitry	Termination	Cat. No.
Double Insulated, Plastic Toggle Switch	SPST	On-Off	Screw	<b>774019*</b>
Double Insulated, Plastic Toggle Switch	SPDT	(On)-Off-(On)	Spade	<b>774004*</b>
Double Insulated, Plastic Toggle Switch	DPDT	(On)-Off-(On)	Spade	<b>774006*</b>

\* 10 Amp/277V AC, 20 Amp/125V AC

## Medium and Light-Duty Toggle Switches

- Great for household appliances and equipment
- Bat toggle switch, 774007 is ideal for battery-powered equipment including trimmers and lawn mowers
- 1/2 in. diameter mounting hole



Description	Poles	Circuitry	Termination	Cat. No.
Bat Toggle with On-Off Faceplate	SPST	On-Off	Screw	<b>774017*</b>
Bat Toggle with On-Off Faceplate	SPST	On-Off	Wire Leads	<b>774018**</b>
Bat Toggle	SPST	On-Ground-Off	Spade	<b>774007***</b>
Short Ball Toggle Switch	SPST	On-Off	Screw	<b>774001*</b>
Short Ball Toggle Switch	SPST	On-Off	Wire Leads	<b>774002*</b>

\* 3 Amp/250V AC, 6 Amp/125V AC  
 \*\* 1/3 HP 125V AC, 4 Amp/250V, 8 Amp/125V, 10 Amp/125V AC  
 \*\*\* For DC voltage

## Toggle Switch Covers

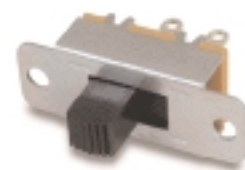
- Great for outdoor and other environmentally tough conditions
- Rubber cover screws onto toggle switches to protect switches from moisture, dust and dirt



Description	Qty.	Cat. No.
Toggle Switch Cover	2	<b>774020</b>

## Slide Switch

- The right switch for household appliances
- Fits standard 9/16 in. x 7/8 in. opening



Description	Poles	Circuitry	Termination	Cat. No.
Slide Switch	SPST	On-Off	Solder Terminals	<b>774051*</b>

\*10 Amp/125V AC, 5 Amp/250V AC

## Push-Button Switches

- Push-on, Push-off Push Button Switches are great for household appliances, lamps and motor controls
- Normally off switch, 774022, is the perfect switch for bell and buzzer applications
- Normally on switch, 774023, works well in test/emergency equipment
- 1/2 in. diameter mounting hole



Description	Color	Poles	Circuitry	Termination	Cat. No.
Maintained Contact Push-Button Switch	Black Plastic	SPST	On-Off	Wire Leads	<b>774021*</b>
Maintained Contact Push-Button Switch	Nickle Plated	SPST	On-Off	Wire Leads	<b>774024**</b>
Maintained Contact Push-Button Switch	Brass Plated	SPST	On-Off	Wire Leads	<b>774025**</b>
Momentary Contact Push-Button Switch	Black Plastic	SPST	(On)-Off	Screw	<b>774022***</b>
Momentary Contact Push-Button Switch	Red Plastic	SPST	On-(Off)	Screw	<b>774023****</b>

\*1/3 HP, 125V AC, 4 Amp/250V, 8 Amp/125V, 10 Amp/125V AC  
 \*\*1 Amp/120VT, 6 Amp/125VL, 6 Amp/125V AC, 3 Amp/250V AC  
 \*\*\*3 Amp/250V AC, 6 Amp/125V AC  
 \*\*\*\*1.5 Amp/277V AC, 3 Amp/120V AC

## Rocker Switches

- Great for household appliances and other small machinery



Description	Rocker	Cut-Out Dimensions (in.)	Poles	Circuitry	Termination	Cat. No.
Appliance Rocker Switch	Black	Standard .550 x 1.125	SPST	On-Off	Spade	<b>774038*</b>
Appliance Rocker Switch	Red Lighted	Standard .550 x 1.125	SPST	On-Off	Spade	<b>774039*</b>
Standard Rocker Switch	Black	.830 x 1.45	SPST	On-Off	Spade	<b>774045**</b>
Miniature Rocker Switch	Red Lighted	.520 x .776	SPST	On-Off	Spade	<b>774048***</b>

\*8 Amp/250V AC, 16 Amp/125V AC  
 \*\*10 Amp/277V AC, 20 AMP/125V AC  
 \*\*\*1/2 HP 250V AC, 1/3 HP 125V AC, 10 Amp/125V AC - 250V AC

## Pull Chain Switches

- Use for ceiling fixture lamps and fans
- 13/32 in. diameter mounting hole



Description	Color	Poles	Circuitry	Termination	Circuit	Cat. No.
Pull Chain	Nickel Plated	SPST	On-Off	Wire Leads	2 Pos-2 Wire	<b>774031*</b>
Pull Chain	Brass Plated	SPST	On-Off	Wire Leads	2 Pos-2 Wire	<b>774032*</b>
2-Speed Pull Chain	Brass Plated	SPST	Off-On-On	Wire Leads	3 Pos-3 Wire	<b>774033*</b>
3-Speed Pull Chain	Brass Plated	SPST	Off-On-On-On	Wire Leads	4 Pos-4 Wire	<b>774034*</b>
3-Speed Pull Chain	Brass Plated	SPST	Off-On(A)-On(B)-On(A+B)	Wire Leads	4 Pos-3 Wire	<b>774037*</b>

\*3 Amp/250V AC, 6 Amp/125V AC

## Rotary, Cord and Door Switches

- Rotary switches are the perfect switch for household appliances, ceiling fixtures and lamps
- Place your lighting controls in a convenient location with a lamp cord toggle switch
- Door switches are great for closets, turning the light on when the door is open and off when it is closed



Description	Color	Mounting Hole Dimensions (in.)	Poles	Circuitry	Termination	Cat. No.
Rotary Switch	Brass Plated	1/2	SPST	On-Off	Wire Leads	<b>774061*</b>
3-Way Rotary Switch	Brass Plated	1/2	SPTT	Off-On(A)-On(B)-On(A+B)	Wire Leads	<b>774062*</b>
Rotary Switch	Black Plastic	1/2	SPST	On-Off	Wire Leads	<b>774069*</b>
Cord Toggle Switch	Brown	N/A	SPST	On-Off	N/A	<b>774073**</b>
Door Switch Kit	White	1.25 x 2.75 x 2.0	SPST	Normally On-(Off)	Wire Leads	<b>774026K†</b>

\*3 Amp/250V AC, 6 Amp/125V AC  
 \*\*5 Amp/250V AC, 10 Amp/125V AC  
 †1/2 HP 125-277V AC 10 Amp/125V AC, 10 Amp/250V AC, 10 Amp/277V AC



## How to Select Resurfacer Grade

### Small Motor and Pocket Resurfacers

Grade code letters designate the following grade combinations:

- A** Medium/Finish
- B** Coarse/Finish
- D** Finish/Polish
- G** Coarse/Medium
- H** Medium/Polish

### All Other Resurfacers

Resurfacers for commutators and copper-alloy slip rings are made in five grades:

- X** Extra coarse—very fast cutting, for “hogging” off excessive copper
- C** Coarse—fast cutting
- M** Medium—for general use, high mica, small ridges and burns
- F** Finish—for use after the three grades above, for periodic application and for removing small burns and ridges immediately after their appearance
- P** Polish—very fine grade (220 aggregate grain) for burnish finish

For all resurfacers, specify grade by adding the appropriate letter as a suffix to the catalog number. (Example: 80-475M for medium grade.)

## How to Select Resurfacer Size

Size is always written length x width x thickness (working face area x depth of stone). For handle types, the handle is mounted parallel to the first dimension. Always use a resurfacer with the largest face possible (length x width). Thickness should be governed by clearance around commutator or ring.

### Commutator Resurfacers

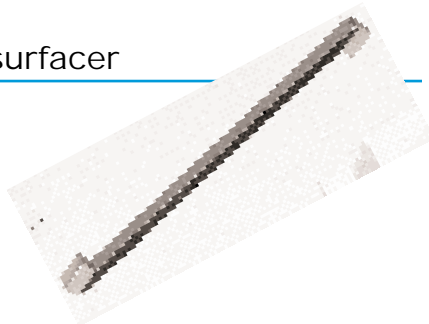
The resurfacer should have a width of approximately 3/4 the length of the commutator bar and as long as will conveniently go between the brush riggings. For periodic application, three or four sizes are generally sufficient. After determining approximate dimensions, select nearest standard size and type.

### Slip Ring Resurfacers

When space permits, use a resurfacer about 1 in. wider than the face width of the ring. Length should be at least three times greater than the longest flat spot to bridge over and ensure a true ring.

## Small Motor-Type Resurfacer

- Different grades of stone on each end
- 10 in. handle
- For use on small fractional horsepower motors

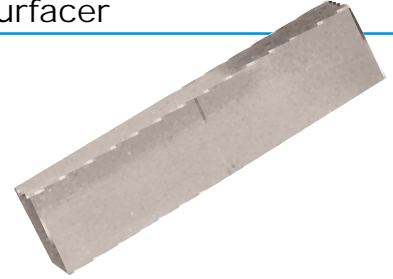


Sizes (Inches)	Grades	Cat. No.
3/4 x 1/2 x 3/8	A, B, D, G, H	<b>80-012*</b>

\*Add grade letter suffix to Cat. No.  
Please allow 1-2 weeks for delivery.

## Pocket-Type Resurfacer

- Convenient two-in-one utility tool for all-around shop maintenance
- Designed for use on small motors and generators
- Available in many two-grade combinations



Sizes (Inches)	Grades	Cat. No.
2 x 1 x 6	A, B, D, G, H	<b>80-112*</b>
2 x 1 x 8		<b>80-137*</b>

\*Add grade letter suffix to Cat. No.  
Please allow 1-2 weeks for delivery.

## Tool-Type Resurfacer

- For use in IDEAL precision grinders or any type of lathe-turning device
- Two resurfacers required for each grinder

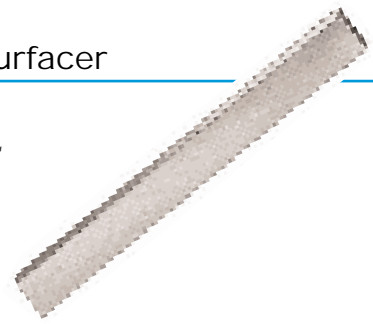


Sizes (Inches)	Grades	Cat. No.
3/4 x 3/4 x 3	X, C, M, F, P	<b>80-504*</b>
1 x 1-1/2 x 6-1/2		<b>80-454*</b>
1 x 2 x 8		<b>80-461*</b>
1-1/2 x 2-1/2 x 8		<b>80-468*</b>
2 x 2 x 8		<b>80-475*</b>
1 x 1-1/2 x 11		<b>80-482*</b>
2 x 2 x 11		<b>80-496*</b>

\*Add grade letter suffix to Cat. No.  
Please allow 1-2 weeks for delivery.

## Pencil-Type Resurfacer

- For use on fans, signal motors, auto generators, locomotive headlight motors and other fractional horsepower motors



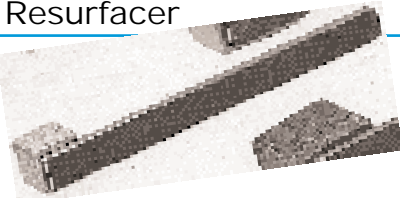
Sizes (Inches)	Grades	Cat. No.
5/8 x 3/8 x 6	X, C, M, F, P	<b>80-075*</b>

\*Add grade letter suffix to Cat. No.  
Please allow 1-2 weeks for delivery.



## Straight-Handle Resurfer

- For use in hard-to-reach commutators on small or enclosed motors
- 10 in. handle

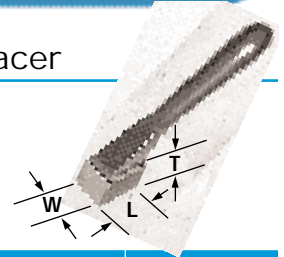


Sizes (Inches)	Grades	Cat. No.
1 x 1 x 1	C, M, F, P	80-155*
1 x 1 x 2		80-165*
2 x 1 x 2		80-184*
3 x 1 x 2		80-193*

\*Add grade letter suffix to Cat. No.  
Please allow 1-2 weeks for delivery.

## Tramway-Handle Resurfer

- Handle shaped to ensure secure grip
- 10-1/2 in. handle permanently mounted at 45° angle

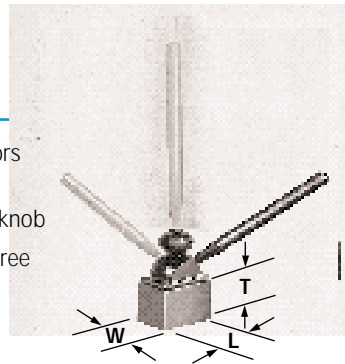


Sizes (Inches)	Grades	Cat. No.
2 x 1-1/2 x 2	X, C, M, F, P	80-255*
2 x 2 x 2		80-265*
3 x 2 x 2		80-274*
3 x 3 x 2		80-284*
4 x 3 x 2		80-293*

\*Add grade letter suffix to Cat. No.  
Please allow 1-2 weeks for delivery.

## Adjustable-Handle Resurfer

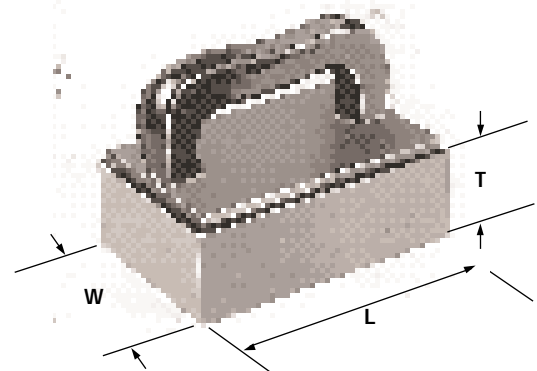
- For use on medium-size motors and small generators
- Permanently fastened center knob
- Extra rod handle adjusts to three vertical positions
- 10 in. handle



Sizes (Inches)	Grades	Cat. No.
2 x 1-1/2 x 2	C, M, F, P	80-205*
2 x 2 x 2		80-215*
3 x 2 x 2		80-224*
3 x 3 x 2		80-234*
4 x 3 x 2		80-243*

\*Add grade letter suffix to Cat. No.  
Please allow 1-2 weeks for delivery.

## Saw-Handle Resurfer



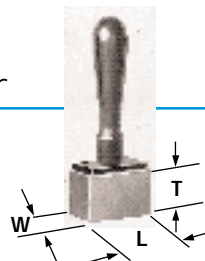
- For use on large motors, small rotary converters, motor-generator sets, telephone generators, etc.
- Handle mounted parallel to length

Sizes (Inches)	Grades	Cat. No.
4 x 1 x 3	X, C, M, F, P	80-353*
4 x 1-1/2 x 3		80-357*
4 x 3 x 2		80-362*
4 x 4 x 3		80-366*
5 x 2 x 2		80-371*
5 x 2 x 3		80-376*
5 x 3 x 2		80-380*
5 x 3 x 3		80-385*
6 x 2 x 3		80-389*
6 x 4 x 3		80-393*
8 x 4 x 3		80-397*

\*Add grade letter suffix to Cat. No.  
Please allow 1-2 weeks for delivery.

## Railway-Handle Resurfer

- Short handle shaped to ensure secure grip
- 7-1/2 in. handle permanently mounted in vertical position



Sizes (Inches)	Grades	Cat. No.
2 x 1-1/2 x 2	C, M, F, P	80-305*
2 x 2 x 2		80-315*
3 x 2 x 2		80-324*
3 x 3 x 2		80-334*

\*Add grade letter suffix to Cat. No.  
Please allow 1-2 weeks for delivery.

## Brush Seater and Commutator Cleaner



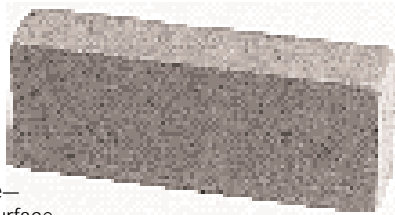
- Gentle acting abrasive for seating carbon brushes and cleaning commutators and slip rings
- Soft, loosely bound grain produces a scouring effect when held against commutator
- Will not remove or scratch copper
- Self-cleaning
- Available in soft(S), medium(M) and hard(H) grades

Sizes (Inches)	Grades	Cat. No.
1/4 x 1/4 x 4-3/4	M, H	23-001*
1/2 x 1/4 x 4-3/4	M, H	23-002*
3/8 x 3/8 x 4-3/4	M, H	23-003*
1/2 x 3/8 x 4-3/4	S, M, H	23-004*
1/2 x 1/2 x 4-3/4	S, M, H	23-005*
5/8 x 1/2 x 4-3/4	S, M, H	23-006*
3/4 x 1/2 x 4-3/4	S, M, H	23-007*
1-1/8 x 5/8 x 4-3/4	S, M, H	23-008*
1/2 x 1 x 4-3/4	S, M, H	23-027*
1 x 1 x 4-3/4	S	23-035
2 x 1 x 4-3/4	S	23-036
2 x 2 x 2	S	23-037
3 x 2 x 4	S	23-039
3 x 2 x 6	S	23-041
3 x 2 x 8	S	23-042

\*Add grade letter suffix to Cat. No.  
Please allow 1-2 weeks for delivery.

## Powr-Polish™ Flexible Abrasive

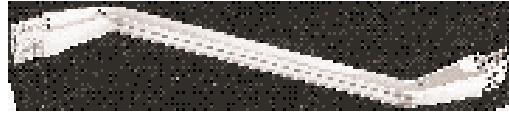
- Fine-grain, non-dusting abrasive held together by a flexible bond
- Serves as both commutator cleaner and burnisher
- Removes dirt and grease—imparts super-finished surface
- Non-conductive and non-loading



Sizes (Inches)	Cat. No.
3/8 x 1/2 x 5	82-001
3/8 x 3/4 x 5	82-002
5/8 x 1 x 5	82-003
1 x 2 x 5	82-004
1 x 4 x 5	82-005
1/8 x 1 x 5	82-006

Please allow 1-2 weeks for delivery.

## Commutator Smoothie® Resurfacing Tool

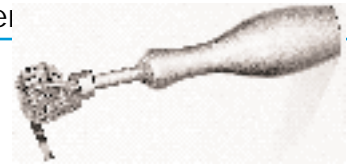


- Designed to smooth commutators of auto generators, starting motors and other similar equipment
- 8-1/2 in. plastic handle with a 5/16 in. x 7/8 in. x 11/16 in. resurfacer on each end
- Features one polish-grade and one finish-grade resurfacer
- Bent handle reaches into any motor frame
- Non-conductive for user safety

Description	Cat. No.
Commutator Smoothie® Resurfacing Tool	80-033

Please allow 1-2 weeks for delivery.

## Slotter and Scraper



- Cleans slots, smooths burrs, removes mica fins and bevels sharp copper edges after undercutting
- Rigid tool-steel bit with V cutting edge at one end and U cutter at other end
- 6-1/2 in. long

Description	Cat. No.
Hand Slotter & Scraper	20-006
Replacement blade	L-7704

Please allow 1-2 weeks for delivery.

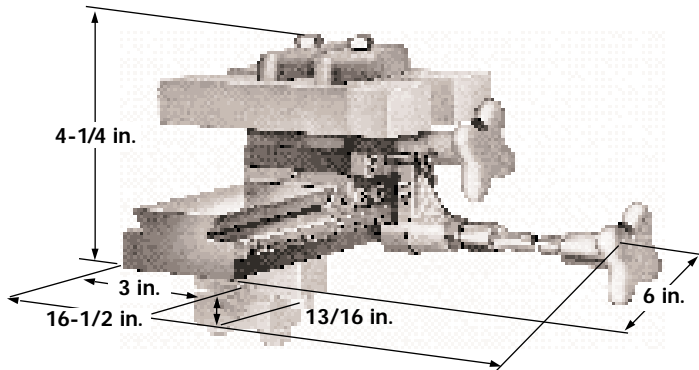
## Commutator Cement

- Non-conductor for filling holes in commutator bars and pitted mica
- Highly adhesive and non-shrinking
- Resists fire, oils and acids



Description	Cat. No.
Commutator Cement (1/2 lb. jar)	54-007

## Midget Precision Grinder



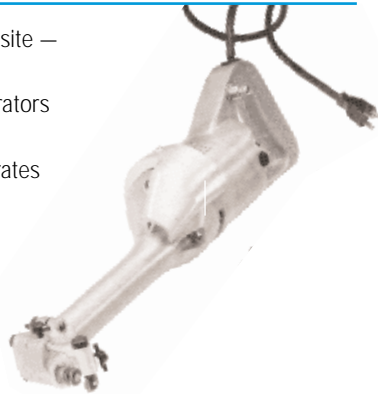
- Right-angle rack and pinion allows for operation in small areas
- 6 in. base — recommended for commutator widths up to 9-1/4 in. (includes extra 1 in. travel obtained by setting resurfacers at slight angle)
- Includes convenient carrying case
- Two tool-type resurfacers required — 80-454 recommended

Description	Cat. No.
Midget Precision Grinder	24-033

Order tool-type resurfacers and brush arm supports separately. Please allow up to 10 weeks for delivery.

## Direct-Drive Mica Undercutter

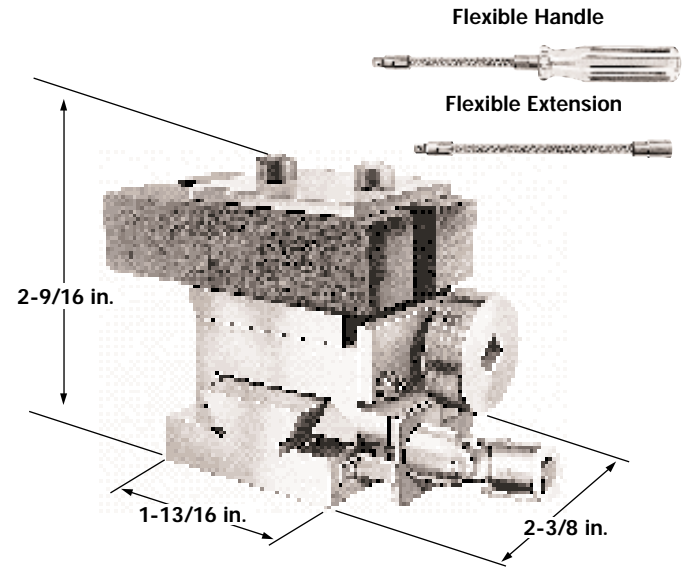
- Compact tool for shop or job site — 16-1/2 in. long and 8-1/4 lbs.
- Designed for motors or generators with limited access ports
- 1/5 H.P. Universal motor operates on 50 and 60 Hz, AC or DC
- Blows away mica dust while undercutting
- Three easily interchangeable heads for different cutting needs — all feature slot guides to help guide cutter for better control and accuracy



Description	Cat. No.
115V, AC/DC main body unit	25-081
230V, AC/DC main body unit	25-082
Small cutter head for 3/4 in. saws (3,500 R.P.M.)	25-083
Standard cutter head for 1 in. saws (2,800 R.P.M.)	25-084
Heavy-duty head for 1-1/4 in. saws (1,850 R.P.M.)	25-085

Order saws and milling cutters separately. Please allow up to 10 weeks for delivery.

## Pee-Wee Precision Grinder

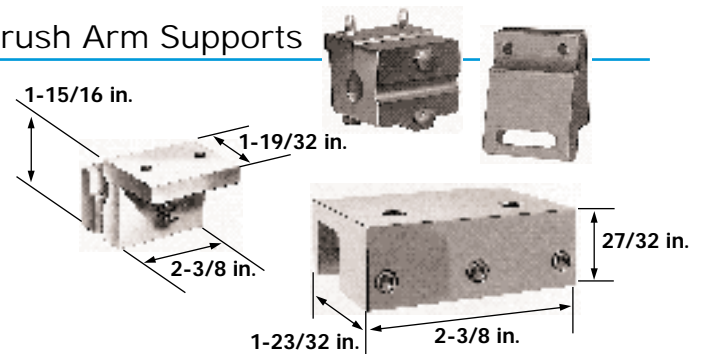


- Compact size for operation in tight areas
- 2-3/8 in. base — designed for use on commutators up to 3-3/4 in wide (includes extra 1 in. travel obtained by setting resurfacers at slight angle)
- Mounts directly onto brush arm or other support
- No major motor or generator dismantling necessary
- Includes 6-3/4 in. flexible handle and carrying case
- 6 in. flexible handle extension for right-angle operation on end-opening machines sold separately
- Two tool-type resurfacers required — 80-504 recommended

Description	Cat. No.
Pee-Wee Precision Grinder	24-082
Replacement Flexible Handle	L-7360
Flexible Extension	L-7361

Order tool-type resurfacers brush & arm supports separately. Please allow up to 10 weeks for delivery.

## Brush Arm Supports



- For use with Midget, Standard, or Pee-Wee Grinders

Description	Cat. No.
Wedge support for flat brush arms	24-042
Small U for round brush arms of 7/16 in. to 1-1/2 in. diameter — two halves are separable	24-043
Support for round brush arm of 5/8 in. to 3/4 in. diameter	24-044
Support for 5/8 in. square brush arm	24-052

Please allow up to 10 weeks for delivery.

## U-Slot Commutator Saws

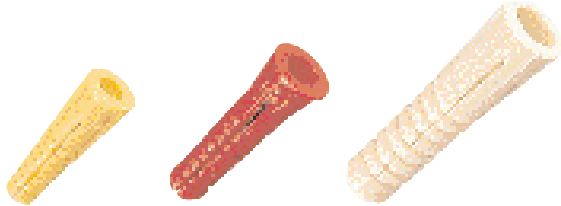
- Hollow ground to provide good clearance
- Spindle speeds up to 12,000 R.P.M.
- Tungsten-carbide saws provide exceptionally long service
- High-speed steel construction provides economical alternative
- Designed for commutator mica only — not recommended for slitting copper or other metals



Size O.D. in. x I.D. in.	Thickness (Inches)												
	.015 Cat. No.	.018 Cat. No.	.020 Cat. No.	.023 Cat. No.	.025 Cat. No.	.028 Cat. No.	.030 Cat. No.	.032 Cat. No.	.035 Cat. No.	.038 Cat. No.	.040 Cat. No.	.043 Cat. No.	.045 Cat. No.
<b>Tungsten-Carbide Saws</b>													
1/4 x 1/8	26-614	26-615	26-616	—	—	—	—	—	—	—	—	—	—
5/16 x 1/8	26-627	26-628	26-629	26-630	26-631	26-632	—	—	—	—	—	—	—
3/4 x 5/16	—	—	26-720	26-721	26-722	26-723	26-724	26-725	26-726	—	—	—	—
7/8 x 5/16	26-731	26-732	26-733	26-734	26-735	26-736	26-737	26-738	26-739	26-740	26-741	26-742	26-743
<b>High-Speed Steel Saws</b>													
5/16 x 1/8	26-151	26-152	26-153	26-154	26-155	26-156	26-157	26-158	—	—	—	—	—
3/8 x 1/8	26-171	26-172	26-173	26-174	26-175	26-176	26-177	26-178	26-179	—	—	—	—
1/2 x 3/16	26-201	26-202	26-203	26-204	26-205	26-206	26-207	26-208	26-209	—	—	—	—
23/32 x 5/16	26-451	26-452	26-453	26-454	26-455	26-456	26-457	26-458	26-459	—	—	—	—
3/4 x 5/16	26-431	26-432	26-433	26-434	26-435	26-436	26-437	26-438	26-439	—	—	—	—
7/8 x 5/16	26-501	26-502	26-503	26-504	26-505	26-506	26-507	26-508	26-509	—	—	—	—
1 x 5/16	26-581	26-582	26-583	26-584	26-585	26-586	26-587	26-588	26-589	—	—	—	—

Please allow 4-6 weeks for delivery.

## Flange-Type Plastic Anchors



- Multi-purpose use in hollow or solid materials
- Excellent for hollow walls — will not fall through
- Maximum expansion at inner end
- Effective, anti-turning ribs
- For use with sheet-metal or wood screws
- High-impact Tenite™ plastic construction resists moisture, corrosion and deterioration (-50°F to 220°F)
- Color-coded for easy identification

Description	Screw Size	Drill Size (In.)	Quantity	Cat. No.
Yellow – 7/8 in. long	6-8-10	3/16	100	90-041
Red – 1 in. long	10-12	1/4	100	90-042
White – 1-1/2 in. long	14-16	5/16	50	90-044

## Flange-Type Plastic Anchor Kits



- Kits include flange-type anchors, slotted/Phillips head screws and masonry bit
- Convenient plastic storage container

Contents	Cat. No.
100 # 6-8-10 x 7/8 in. Flange-type anchors, 100 # 8 x 1 in. combo-head, sheet-metal screws & 1-3/16 in. masonry bit (carbide-tipped)	90-051
100 # 10-12 x 1 in. Flange-type anchors, 100 # 10 x 1-1/4 in. combo-head, sheet-metal screws & 1-1/4 in. masonry bit (carbide-tipped)	90-052
100 # 10-12 x 1 in. Flange-type anchors, 100 # 12 x 1 in. combo-head, sheet-metal screws & 1-1/4 in. masonry bit (carbide-tipped)	90-053
40 # 14-16 x 1-1/2 in. Flange-type anchors, 40 # 14 x 1-1/2 in. combo-head, sheet-metal screws & 1-5/16 in. masonry bit (carbide-tipped)	90-054
100 # 10-12 x 1 in. Flange-type anchors, 100 # 10 x 1 in. combo-head, sheet-metal screws & 1-1/4 in. masonry bit (carbide-tipped)	90-055
200 # 6-8-10 x 7/8 in. Flange-type anchors, 100 # 10-12 x 1 in. flange-type anchors, 1-3/16 in. masonry bit (carbide-tipped) & 1-1/4 in. masonry bit (carbide-tipped)	90-056