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# ANCHORS & GUYING

## Eight Way Expanding Anchor (steel)

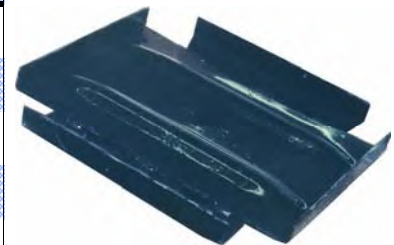


Cat. No	Size Anchor and Hole Inches	Max. Size Rod Inches	Area Expanded Sq. Inches	Holding Strength Classification	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K150-8</b>	8	3/4	135	12000 lbs	1000	5
<b>K150-10</b>	10	1	200	20000 lbs	1900	3

- ◆ Easy to install
- ◆ Contoured blades cut readily into undisturbed earth
- ◆ Deeply ribbed and embossed for greater strength
- ◆ Recommended for all soil types

## Anchor Plates Square

Cat. No.	Area Sq. Inches	Dimensions Inches	Rod Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K152-12</b>	150	12-1/2 X 12-1/2	1/2 or 5/8	1050	1
<b>K152-14</b>	200	14-1/2 X 14-1/2	5/8 or 3/4	1200	1
<b>K152-16</b>	250	16-1/4 X 16-1/4	5/8 or 3/4	1300	1
<b>K152-18</b>	300	18 X 18	5/8, 3/4 or 1	1600	1
<b>K152-21</b>	400	21 X 21	3/4, 1 or 1-1/4	2400	1
<b>K152-24</b>	400	24 X 24	3/4, 1 or 1-1/4	2700	1



K152-12

- ◆ Heavy gauge steel
- ◆ Four reinforcing ribs and four flanges
- ◆ Plates welded together at right angles. Ribs positioned concave and convex to plates ensuring maximum holding power and resistance to deformation of the unit
- ◆ Nut retainer welded to underside of plate providing positive guide for anchor rod (at 90° to pulling force of rod at all times)

# ANCHORS & GUYING

## Screw Anchor



Cat. No.	Blade Dia. Inches	Rod Dia. Inches	Rod Length Feet	Approx Strength Dry Clay	Shipping Wt. lbs (100 pcs)	Std. Pkg
K151-6	6	3/4	5-1/2	5000 lbs	1050	5
K151-8	8	1	5-1/2	8000 lbs	1500	2

- ◆ C.S.A. standard
- ◆ Large forged rod eye to take 1" bar for hand installation
- ◆ Chisel point is provided to aid installation
- ◆ Blade pitched to bite correctly into soil without undue earth disturbance
- ◆ Hot dip galvanized

## Power Installed Screw Anchors

Cat No.	Helix Inches	Tapped Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K156-2	8	1	1000	5
K156-5	10	1	1300	4
K156-13	12	1	1330	3

1 3/8" Hub

- ◆ Rated at 6,000 ft lb torque
- ◆ Tapped hub for 5/8"-11 threads available

Cat No.	Helix Inches	Tapped Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K156-8	8	1	1100	5
K156-10	10	1	1400	4
K156-12	12	1	1600	2

1 1/2" Hub

- ◆ Rated at 8,000 ft lb torque
- ◆ Tapped hub for 5/8"-11 threads available



## Heavy Duty Power Installed Screw Anchors

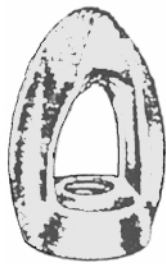
Cat No.	Helix Inches	Tapped Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K156-108	8	1	1100	5
K156-110	10	1	1300	4
K156-112	12	1	1500	2
K156-114	14	1	2000	2



- ◆ Rated at 10,000 ft lb torque
- ◆ Universal hub - 1 1/2" or 1 3/8" drive shaft

# ANCHORS & GUYING

## Thimble Eyenuts



K156-34



K156-36

- ◆ C.S.A standard
- ◆ Drop forged steel
- ◆ Hot dip galvanized



K156-35

Cat. No.	Size Inches	Eye	Rod Dia. Inches	Shipping Wt. lbs	Std. Pkg
K156-31	5/8	Single	5/8	100	25
K156-32	5/8	Double	5/8	150	25
K156-33	5/8	Triple	5/8	200	25
K156-34	1	Single	3/4 and 1	100	25
K156-35	1	Double	3/4 and 1	150	25
K156-36	1	Triple	3/4 and 1	200	25

## Anchor Rod - Auxiliary Eye

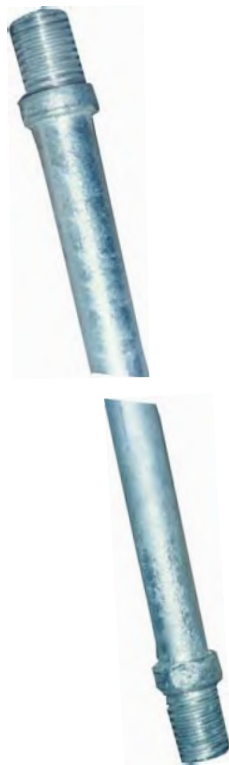
- ◆ Where Anchor capacity is available offers most economical method of adding one or even two additional guys to any type of existing anchor rod
- ◆ Generous thimble eye
- ◆ Easy installation
- ◆ Casting - ductile iron
- ◆ Hot dip galvanized



Cat. No.	Type of Nut	Anchor Rod Dia. Inches	Max Strand Size Inches	Thimble Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K157-1	SQ.	5/8, 3/4	1/2	1-1/2	280	25
K157-3	SQ.	7/8, 1	1/2	1-1/2	360	25

# ANCHORS & GUYING

## Extension Rods



Cat. No.	Rod Dia. Inches	Length Feet	Thread Dia. Inches	Shipping Wt. lbs. (100 pcs)	Std. Pkg
K156-21	5/8	7	5/8	750	10
K156-22	3/4	7	1	900	10
K156-23	1	7	1	1300	5
K156-41	5/8	3-1/2	5/8	400	10
K156-42	3/4	3-1/2	1	585	10
K156-43	1	3-1/2	1	985	5

- ◆ Drop forged both ends
- ◆ Hot dip galvanized

## Anchor Rod Coupling

Cat No.	Size Inches	Threads	Shipping Wt. lbs (100 pcs)	Std. Pkg
K156-353	5/8	11	50	50
K156-354	1	8	66	50

- ◆ Hot dip galvanized



# ANCHORS & GUYING

## Anchor Rods



K153

### Single Thimble Eye

- ◆ Drop forged steel - galvanized
- ◆ Supplied with one square nut
- ◆ Minimum Thread length - 2"

Cat No.	Rod Dia. Inches	Length Feet	Shipping Wt. lbs (100 pcs)	Std. Pkg
K153-5806	5/8	6	720	5
K153-5807	5/8	7	800	5
K153-5808	5/8	8	900	5
K153-3406	3/4	6	984	5

Cat.No.	Rod Dia. Inches	Length Feet	Shipping Wt. lbs (100 pcs)	Std. Pkg
K153-3407	3/4	7	1130	5
K153-3408	3/4	8	1290	5
K153-3409	3/4	9	1430	5
K153-3410	3/4	10	1560	5



K154

### Double Thimble Eye

- ◆ Drop forged steel - galvanized
- ◆ Supplied with one square nut
- ◆ Minimum Thread length - 2"

Cat No.	Rod Dia. Inches	Length Feet	Shipping Wt. lbs (100 pcs)	Std. Pkg
K154-5806	5/8	6	750	5
K154-5807	5/8	7	830	5
K154-5808	5/8	8	930	5
K154-3406	3/4	6	1010	5
K154-3407	3/4	7	1160	5

Cat No.	Rod Dia. Inches	Length Feet	Shipping Wt. lbs (100 pcs)	Std. Pkg
K154-3408	3/4	8	1320	5
K154-3409	3/4	9	1610	5
K154-3410	3/4	10	1800	3
K154-1008	1	8	2350	2
K154-1009	1	9	2900	2
K154-1010	1	10	3400	2



K155

### Triple Thimble Eye

- ◆ Drop forged steel - galvanized
- ◆ Supplied with one square nut
- ◆ Minimum Thread length - 2"

Cat No.	Rod Dia. Inches	Length Feet	Shipping Wt. lbs. (100 pcs)	Std Pkg.
K155-3407	3/4	7	1610	1
K155-1007	1	7	1970	1
K155-1008	1	8	2250	1

Cat No.	Rod Dia. Inches	Length Feet	Shipping Wt. lbs. (100 pcs)	Std Pkg.
K155-1009	1	9	2530	1
K155-1010	1	10	2810	1
K155-1012	1	12	3400	1

# ANCHORS & GUYING

## Rock Anchor



- ◆ Drop forged thimble eye
- ◆ Heavy wedge and split end
- ◆ Hot dip galvanized

Cat No.	Rod Dia. Inches	Rod Length Inches	Shipping Wt. lbs (100 pcs)	Std Pkg.
<b>K161-12</b>	1	12	300	10
<b>K161-18</b>	1	18	500	10

## Rock Anchor Extensions

Cat No.	Rod Dia. Inches	Rod Length Feet	Load lbs.	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K160-1</b>	5/8	3	12500	500	4
<b>K160-2</b>	3/4	3	18500	750	4
<b>K160-3</b>	3/4	4	18500	850	4
<b>K160-4</b>	3/4	5	18500	1000	4

- ◆ Safety bolts 3/4" x 4 1/2" included
- ◆ Used where rock formation is near surface
- ◆ Drop forged with the clevis swedged to rod
- ◆ Double thimble eye for one or two guy strand wires
- ◆ Hot dip galvanized





# ANCHORS & GUYING

## Rock Anchor Sliding Cone Wedges

K148 Wedge 1 3/4" Dia. Drilled Hole 1 7/8" Dia.

Cat No.	Rod Dia. Inches	Rod Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K148-15	3/4	15	337	4
K148-30	3/4	30	675	4
K148-53	3/4	53	750	4
K148-60	3/4	60	850	4
K148-72	3/4	72	1000	4
K148-84	3/4	84	1270	4
K148-96	3/4	96	1500	4



- ◆ Rods - hot dip galvanized
- ◆ Wedge - oxide inhibiting coating
- ◆ Other Lengths on Request

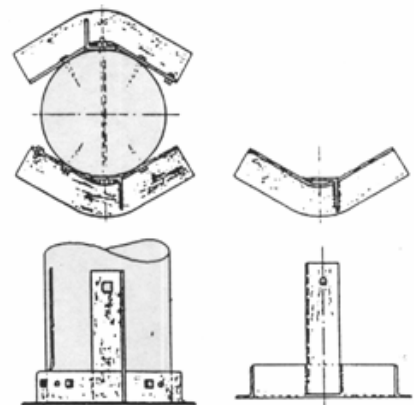
K149 Wedge 2 1/4" Dia. Drilled Hole 2 3/8" Dia.

Cat No.	Rod Dia. Inches	Rod Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K149-30	1	30	500	4
K149-36	1	36	600	4
K149-60	1	60	1250	4
K149-72	1	72	1500	4
K149-96	1	96	1800	4

## Pole Bearing Plates

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K170	3600	1 Pr.

- ◆ Two required per pole
- ◆ Provides firm footing for pole or structure
- ◆ Increases resistance to uplift
- ◆ Machine and lag bolts not included - order separately
- ◆ Hot dip galvanized



# ANCHORS & GUYING

## Serving Sleeves



Cat. No	Strand Size Inches	Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K49-1	5/16	1-1/2	5	100
K49-2	3/8	1-3/4	6	100
K49-3	7/16	2	7	100

- ◆ Eliminates frayed ends on guy wire
- ◆ Protects lineman's hands
- ◆ Speedy & economical to install - no special tools required
- ◆ Hot dip galvanized

## Guy Clamps

Cat No.	No. Bolts	Size Bolts Inches	Length Inches	Strand Size Inches	Type	Shipping Wt. lbs (100 pcs)	Std. Pkg
K162-1	1	1/2	1-1/2	3/16 - 7/16	medium	23	50
K162-2	2	1/2	3-1/2	3/16 - 7/16	medium	126	25
K162-3	3	1/2	6	3/16 - 7/16	medium	235	25
K162-4	3	5/8	6	5/16 - 1/2	heavy	300	25



K162-2



K162-4

- ◆ C.S.A. Standard
- ◆ Made from hot rolled, open hearth steel with special high strength steel bolts
- ◆ All clamps have straight smooth clamping surface giving greater holding power
- ◆ Clamp bars punched to accommodate shoulders of bolts to prevent bolts from turning. Also permits assembling from either side
- ◆ Hot dip galvanized

## Guy Thimbles



Cat. No	Size Strand Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K164-1	3/8	10	500
K164-2	1/2	21	250
K164-3	5/8	25	100

- ◆ Made of pressed steel and grooved to fit various sizes of guy strands
- ◆ Grooves avoid sharp kinks in guy wire
- ◆ Hot dip galvanized
- ◆ Other sizes on request



# ANCHORS & GUYING

## Guy Hooks



Cat No.	No. Mtg. Hole	Second Mtg. Hole Inches	Max. Bolt Dia. Inches	Max. Strand Dia. Inches	Thimble Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K133-AX</b>	1	-	3/4	1/2	1-3/8	110	25
<b>K133-2*</b>	1	-	3/4	1/2	1-3/8	160	25
<b>K133-3</b>	1	-	1	5/8	1-3/8	220	25
<b>K133-4</b>	2	1/2	3/4	1/2	1-3/8	158	25
<b>K133-5*</b>	2	1/2	3/4	1/2	1-3/8	120	25

- ◆ C.S.A. Standard
- ◆ Almat guy hook ideally suited for down or head guying
- ◆ Teeth & spurs down slot on wood pole
- ◆ Used on any angle to 90°
- ◆ Takes 5/8" or 3/4" bolt
- ◆ Can also be used on concrete or steel poles ( add " CS" to CAT NO. )
- ◆ Lower hole for lag screw or bolt to prevent twisting
- ◆ \* No spurs - for concrete or steel poles.

## Combination Guy Hooks



Cat No.	Upper Hole Dia. Inches	Lower Hole Dia. Inches	Max. Strand Dia. Inches	Thimble Dia. Inches	Pin Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K345-1</b>	3/4	5/8	1/2	1-3/8	5/8	200	25
<b>K345-2</b>	3/4	5/8	1/2	1-3/8	3/4	200	25
<b>K345-3</b>	1	1	—	—	7/8	700	25

- ◆ Used with strand or fiberglass strain insulators
- ◆ Malleable iron casting
- ◆ Hot dip galvanized
- ◆ \*Add ACS for concrete or steel poles (no spurs)

# ANCHORS & GUYING

## Guy Strain Plates



Cat No.	Hook	Size	Shipping Wt. lbs (100 pcs)	Std. Pkg
K45-1	No	4 x 8 x 12g	100	25
K45-2	Yes	4 x 8 x 12g	110	25

- ◆ Prevents guy strands cutting into wood pole
- ◆ Six nail holes provided
- ◆ Hook is useful when a downpull is required
- ◆ Formed steel - Hot dip galvanized

## 2 - Hole Lift Plates - Curved

Cat No.	Bolt Dia. Inches	Bolt Hole Inches	Plate Size Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K46-1	5/8	11/16 x 15/16	2-1/2 x 7 x 3/16	90	50
K46-2	3/4	13/16 x 1-1/16	2-1/2 x 7 x 1/4	119	40
K46-3	1	1-1/16 x 5/16	2-1/2 x 7 x 5/16	141	30



## 3 - Hole Lift Plates - Curved

Cat No.	Bolt Dia. Inches	Bolt Hole Inches	Plate Size Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K46-6	5/8	11/16 x 15/16	2-1/2 x 7 x 3/16	86	50
K46-7	3/4	13/16 x 1-1/16	2-1/2 x 7 x 1/4	115	40
K46-8	1	1-1/16 x 5/16	2-1/2 x 7 x 5/16	139	30

## Guy Strand



\* C.S.A. Standard

- ◆ Used for guying
- ◆ Supplied in coils of 250 & 500 ft. Galvanized
- ◆ Other sizes on request

Strand Dia. Inches	Breaking Strength		Shipping Wt. lbs (1000 ft.)
	Hard Grade 110	Crucible Grade 180	
1/4	*3950	*6450	129
5/16	*6800	11150	222
3/8	*8250	13500	270
7/16	11900	19500	388
1/2	*15600	*25550	510

# ANCHORS & GUYING

## Sidewalk Guy Struts



K43-1



K43-2



K43-4



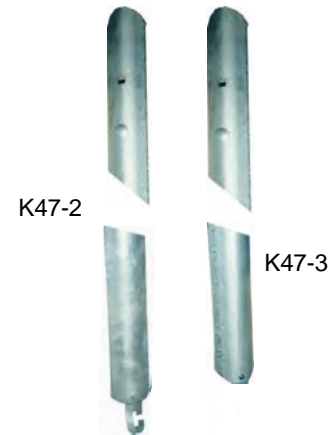
K43-3

Cat No.	Pipe Size Inches	Description	Shipping Wt lbs (100 pcs)	Std. Pkg
K43-1	2	Guy Clamp Fitting	300	15
K43-2	2	Pole Plate Fitting	200	15
K43-3*	2 to 2-1/2	Guy Clamp Fitting	500	10
K43-4*	2 to 2-1/2	Pole Plate Fitting	400	10

- ◆ C.S.A. Standard
- ◆ Provides head clearance over sidewalk
- ◆ Used with standard steel pipe
- ◆ Fittings supplied with set screws
- ◆ Malleable casting
- ◆ \* Add "A" to Cat No. for Aluminum

## Guy Guards

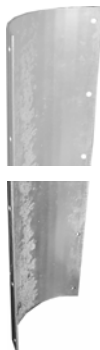
Cat No.	Length Feet	Material	Shipping Wt. lbs (100 pcs)	Std. Pkg
K47-2	7	Half Round	1100	5
K47-3	8	Half Round	1250	4
K47-4	7	Half Hex	1100	10
K47-5	7	Plastic Full Round	315	10



K47-2,3,4

K47-5

- ◆ Steel hot dip galvanized
- ◆ Supplied with clamp for easy installation
- ◆ Tough, durable polyethylene, clamps attached
- ◆ Available in highway yellow or grass green - specify



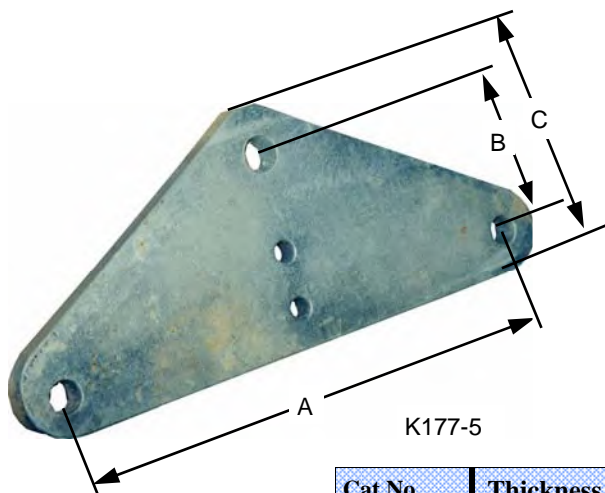
- ◆ Used to protect poles from vehicle collision
- ◆ Holes are 9/16" for 1/2" lag bolts
- ◆ Hot dip galvanized

## Hub Guards

Cat No.	Size Inches	Radius Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K50-1	16 x 18 x 1/8	7-1/2	1100	1
K50-2	16 x 30 x 3/16	7-1/2	2750	1

# ANCHORS & GUYING

## Strain Yoke Plates



K177-5



K177-3

Cat No.	Thickness Inches	A Inches	B Inches	C Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K177-1	1/2	5	2-1/2	4-5/8	320	5
K177-2	5/8	8	2-5/16	4-11/16	600	5
K177-3	5/8	8	4-3/8	6-3/4	800	5
K177-4	5/8	17-7/8	4-9/16	7	1600	5
K177-5	5/8	13	3-11/16	6	1040	5
K177-6	5/8	12	5	6	700	5



K177-4



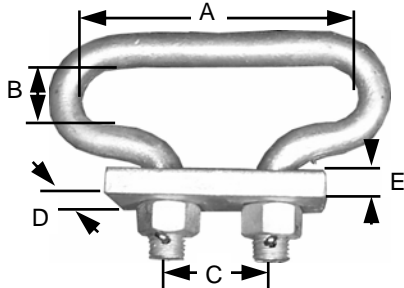
K177-6



K177-1

- ◆ Some of the strain yoke plates available are shown here. Special yoke plate made to customer's specifications.
- ◆ Specify dimensions "A" & "B" strength requirements, number of holes required and sizes.
- ◆ Plate made from structural steel plate.
- ◆ All corners rounded to decrease corona effect
- ◆ Hot dip galvanized

# ANCHORS & GUYING



## Strain Links (with Plate)

- ◆ Used for deadending on all structures and towers
- ◆ All parts hot dip galvanized

Cat No.	Rod Dia. Inches	A Inches	B Inches	C Inches	D Inches	E Inches	Ultimate Strength lbs	Shipping Wt. lbs (100 pcs)	Std. Pkg
K182-1	5/8	5-7/8	1-3/8	1-5/8	1-3/4	1/2	25000	350	10
K182-2	3/4	6-1/8	1-3/8	1-7/8	1-3/4	5/8	35000	450	10
K182-3	7/8	7	1-1/2	2-3/8	2	5/8	50000	750	5
K182-4	1	8	1-3/4	3	2-1/2	5/8	65000	950	1
K182-5	1-1/4	8-1/2	2	3-1/2	3	5/8	100000	1350	1

## Pole Bands (Regular Type)



- ◆ Formed from 1/4" x 1 1/2" flat steel bar
- ◆ Specify size of bolt required when ordering
- ◆ Machine bolts supplied for clamping at take off points
- ◆ Pole bands designed to accept either 1/2" or 5/8" x 2" machine bolts, both at clamp and take off areas
- ◆ Hot dip galvanized
- ◆ Other sizes on request

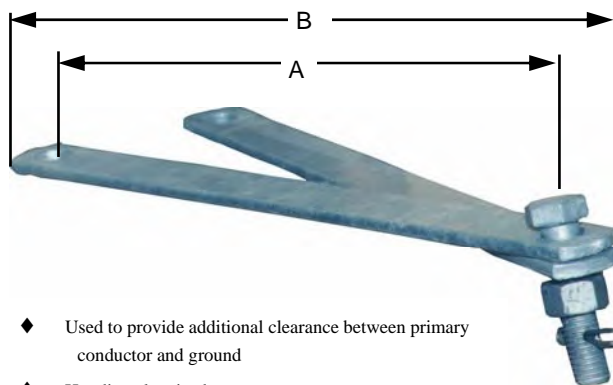


Cat No.	Pipe Size Inches	Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K30-3	3-1/2	4	325	5
K30-4	4	4-1/2	340	5
K30-5	5	5-9/16	410	5
K30-6	6	6-5/8	430	5
K30-7	7	7-5/8	470	10
K30-8	8	8-5/8	500	8
K30-9	9	9-5/8	550	8

Cat No.	Pipe Size Inches	Dia. Inches	Shipping Wt. lbs	Std. Pkg
K31-3	3-1/2	4	380	5
K31-4	4	4-1/2	410	10
K31-5	5	5-9/16	460	10
K31-6	6	6-5/8	500	8
K31-7	7	7-5/8	530	8
K31-8	8	8-5/8	560	8
K31-9	9	9-5/8	600	5

# ANCHORS & GUYING

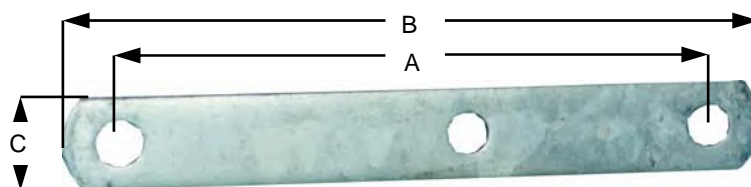
## Strain Plate Clevis (Extension Assembly)



- ◆ Used to provide additional clearance between primary conductor and ground
- ◆ Hot dip galvanized
- ◆ Other sizes and drilling on request
- ◆ Ring fills or spacing washers - order separately

Cat No.	A Inches	B Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K53-7	7-1/2	9	220	25
K53-13	13-1/2	15	300	15
K53-19	19-1/2	21	400	10
K53-27	27-1/2	29	500	10
K53-32	32	33-1/2	600	10

## Extension Straps

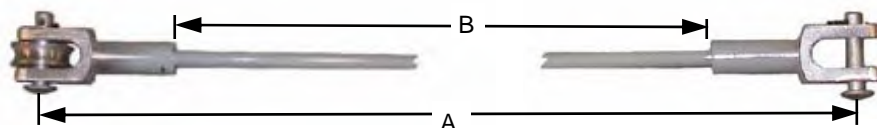


Cat No.	A Inches	B Inches	C Inches	Thickness Inches	Holes Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K52-3	3	4-1/2	1-1/2	1/4	11/16	44	10/Bundle
K52-6	6	7-3/4	1-1/2	1/4	11/16	100	10/Bundle
K52-8	8	9-3/4	1-1/2	1/4	11/16	120	10/Bundle
K52-10	10	11-3/4	1-1/2	1/4	11/16	140	10/Bundle
K52-12	12	13-3/4	1-1/2	3/8	11/16	210	10/Bundle
K52-14	14	15-3/4	2	3/8	11/16	179	10/Bundle
K52-18	18	19-3/4	1-1/2	1/4	11/16	300	10/Bundle
K52-32	32	33-1/2	1-1/2	1/4	11/16	352	10/Bundle

- ◆ C.S.A. Standard
- ◆ Provides additional clearance between primary conductor and ground
- ◆ Other sizes and drilling on request
- ◆ Hot dip galvanized

# ANCHORS & GUYING

## Epoxy Rod



- ◆ **FITTINGS:** High Strength Aluminum Alloy
- ◆ **ROD:** Fiberglass with Ultraviolet Protective Coating
- ◆ 15,000 LB Min. Ultimate Tensile Strength
- ◆ Includes one roller. (see last digit of Cat No.)
- ◆ \*If required, specify 0 or 2 rollers by changing last digit of Cat No. accordingly.
- ◆ Larger sizes available on request

Cat. No	A Inches	B Inches	Shipping Wt. lbs (100 Pcs)	Std. Pkg
CC15-121*	21-1/2	12	280	10
CC15-181*	27-1/2	18	290	10
CC15-241*	33-1/2	24	300	10
CC15-301*	39-1/2	30	310	10
CC15-361*	45-1/2	36	320	10

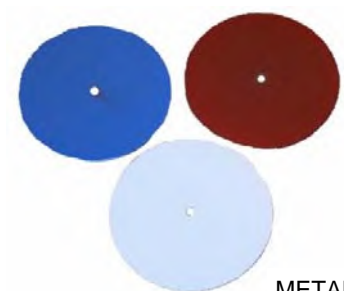
## Plastic Phasing Disc

Cat No.	Wall Thickness Inches	Shipping Wt. lbs (100 Pcs)	Std. Pkg.
Phasing Disc - Blue	.070	3	100
Phasing Disc - Red	.070	3	100
Phasing Disc - White	.070	3	100
Phasing Disc - Yellow	.070	3	100



POLYETHYLENE

## Metal Phasing Disc



METAL

Order by Colour	Wall Thickness Inches	Shipping Wt. lbs (100 Pcs)	Std. Pkg.
TR3PH	.070	15	100

- ◆ Specify colour when ordering - blue, red or white

# ANCHORS & GUYING

## GUY PREFORM

## Preforms

Cat. No	Nominal Size Inches	Construction	Mean Dia. Inches	Strength lbs	Length Inches	Colour	Shipping Wt. lbs (100 Pcs)	Std. Pkg
1/4-25-GN	1/4	3 or 7-Wire	.249	6650	25	Yellow	34	50
9/32-28-GN	9/32	7-Wire	.285	8950	28	Blue	54	50
5/16-30-GN	5/16	3 or 7-Wire	.327	11200	30	Black	70	50
3/8-35-GN	3/8	3 or 7-Wire	.360	15400	35	Orange	104	50
7/16-38-GN	7/16	7-Wire	.432	20800	38	Green	160	25
1/2-45-GN	1/2	7 or 19-Wire	.495	26900	45	Blue	254	25

## SERVICE ENDS



GUY PREFORM

Cat No.	Size A.W.G. Circular Mills	Length Inches	Colour	Shipping Wt. lbs (100 Pcs)	Std. Pkg.
10-SSG	6	10	Blue	6	200
12-SSG	5	12	Green	10	100
13-SSG	4	13	Orange	12	100
14-SSG	3	14	Black	15	100
15-SSG	2	15	Red	16	100
17-SSG	1	17	Blue	35	40
19-SSG	1/0	19	Yellow	40	40
21-SSG	2/0	21	Black	45	40
23-SSG	3/0	23	Green	50	30
26-SSG	4/0	26	Orange	54	50

## DEAD END PREFORM

Cat No.	Size A.W.G. Circular Mills	Type	Dia. Inches	Min. Holding lbs	Length Inches	Colour	Shipping Wt. lbs (100 Pcs)	Std. Pkg
19-ADN	6	ACSR	.193	590	19	Blue	11	75
22-ADN	4	"	.250	1000	22	Orange	20	40
24-ADN	2	"	.316	1499	24	Red	23	40
26-ADN	2	"	.331	1864	26	Green	26	50
28-ADN	1/0	"	.398	2291	28	Yellow	30	40
31-ADN	2/0	"	.447	2838	31	Blue	40	30
35-ADN	3/0	"	.520	3512	35	Orange	35	25
37-ADN	4/0	"	.563	4434	37	Red	37	25
39-ADN	266.800cm	"	.642	6030	39	Black	39	20
44-ADN	336.400cm	"	.721	7476	44	Green	44	20



# GROUNDING

## Steel Ground Rods



- ◆ Ground rod 5/8" and 3/4" dia. are galvanized full length.
- ◆ Ground Rod Clamps - No's K56-1 or K56-2 are designed for use on 1/2", 5/8", & 3/4" rods, and must be ordered separately.

Cat No.	Dia. Inches	Length Feet	Point	Shipping Wt. lbs (100 pcs)	Std. Pkg
K61-1	5/8	6	Cone	600	5
K61-2	5/8	10	Cone	1000	5
K61-3	3/4	6	Cone	900	5
K61-4	3/4	8	Cone	1200	5
K61-5	3/4	10	Cone	1500	5
K61-7	5/8	7	Cone	700	5
K61-8	5/8	8	Cone	800	5
K61-20	3/4	8	Tapered	1200	5
K61-21	3/4	10	Tapered	1500	5

## Ground Rod Drivers

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K181-A	2700	1
K181-B	1500	1

- ◆ Driver made from 1.9" diameter extra heavy steel pipe 4' long with 4" PLUG doweled and welded in top end
- ◆ Extension made from 7/8" carbon steel rod doweled and welded into 1.9" diameter extra heavy steel pipe 9" long
- ◆ Hot dip galvanized

K181-A



K181-B



## Ground Rod Clamps (Steel)

K56-1

- ◆ Formed from 3/16" x 1 3/4" steel and furnished with one 1/2" x 2 1/4" square head steel set screw, two 1/2" square nuts and two 1/2" round washers
- ◆ Will accommodate No. 8 to 2/0 stranded conductor



K56-1

- ◆ Both clamps are designed for use on regular or sectional type 1/2", 5/8" and 3/4" steel ground rods
- ◆ Both clamps are hot dip galvanized

K56-2

- ◆ Made from 3/16" x 1 3/4" steel and furnished with square head set screw 1/2" x 2/14" long, 2 square nuts, and one specially formed bracket
- ◆ Will accommodate any conductor up to 1/2" diameter



K56-2

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K56-1	66	50
K56-2	66	50

# GROUNDING

## Ground Rods (Copper Bonded)



- ◆ Heavy uniform covering of electrolytic copper
- ◆ Corrosion resistant
- ◆ Easy Driving
- ◆ Bronze connectors should be used with copper bonded ground rods

Cat. No	Dia. Inches	Length Feet	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K62-7</b>	1/2	7	440	5
<b>K62-8</b>	1/2	8	505	5
<b>K63-6</b>	5/8	6	575	5
<b>K63-8</b>	5/8	8	765	5
<b>K63-10</b>	5/8	10	955	5
<b>K64-6</b>	3/4	6	855	5
<b>K64-8</b>	3/4	8	1140	5
<b>K64-10</b>	3/4	10	1425	5

## Ground Rod Connectors (Bronze)

Cat. No	Rod Dia. Inches	Wire Range Max. Min.	Thread Size UNC-2A	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K56-58</b>	5/8	1/0 Str. 8 Sol.	7/16-14	29	50
<b>K56-34</b>	3/4	1/0 Str. 8	7/16-14	33	100



- ◆ Non ferrous casting with clamping screw which clamps ground wire to copper bonded ground rod
- ◆ Floating pressure bar distributes pressure evenly over large area of ground bar



## Ground Plate

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K61-56</b>	1100	1

- ◆ Complete with 3/4" Ground Rod Connection Post
- ◆ Hot dip galvanized
- ◆ 5/8" post available upon request
- ◆ Ground Rod Clamp not included. Order separately. Cat No. K56-1, K56-2 or K56-34

# GROUNDING

## Ground Support Clamp

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K56-4	40	50

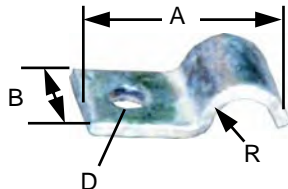
- ◆ Ground support clamp made of self aging aluminum casting alloy
- ◆ Body drilled and tapped oversize to suit 5/8" - 11 UNC galvanized steel machine bolt. Bolt not included
- ◆ For .222 to .546 Alumiweld or galvanized steel cable to #9 solid copper wire



K56-4

## Ground Wire Clips

Cat No.	A Inches	B Inches	D Inches	R Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K57-1	1-1/2	3/4	9/32	3/16	4.5	100
K57-2	1-1/2	3/4	9/32	15/16	6	100

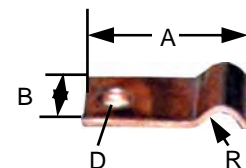


- ◆ Made from 1/8" x 3/4" mild steel
- ◆ Used to fasten ground wires on steel structures
- ◆ Accommodates conductor range of 1/0 to 2000 MCM AWG stranded copper
- ◆ Galvanized

## Copper Ground Wire Clips

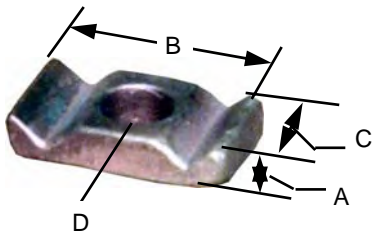
Cat No.	A Inches	B Inches	D Inches	R Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K57-6C	1-1/2	3/4	9/32	3/16	5	100

- ◆ Made from 1/8" x 3/4" copper flat bar
- ◆ Used for clamping stranded wire
- ◆ Made to Ontario Hydro Spec.



# GROUNDING

## Copper Ground Clamp - Splice



Cat No.	A Inches	B Inches	C Inches	D Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K57-20</b>	7/16	1-13/16	1	19/32	20	100

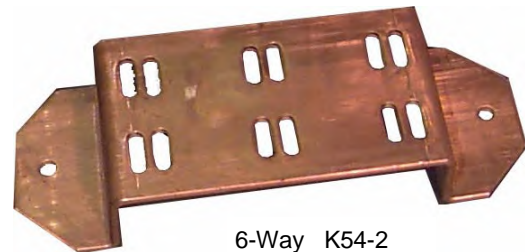
- ◆ Made from copper alloy
- ◆ Used for splicing parallel non-tension to flat surface

## Copper Ground Connection Plates

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K54-1</b>	112	25
<b>K54-2</b>	216	25



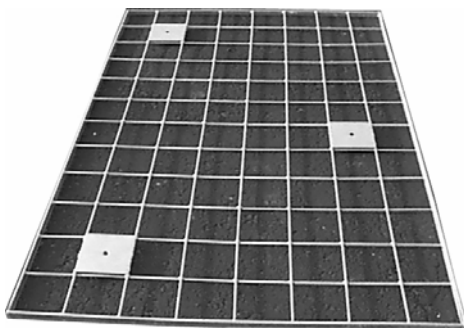
3-Way K54-1



6-Way K54-2

- ◆ Made of hard copper plate with slots to accommodate split bolt connectors for No. 6 copper wire
- ◆ Separate connections allow for easy testing and inspection
- ◆ Lag bolts and split bolt connectors to be ordered separately

## Gradient Control Mat



- ◆ 6 ft x 4 ft with 6" x 6" mesh made from 1/4" dia. steel rod, with provision to install 3 ground connectors
- ◆ Mat is used with all operation switch positions in sub station enclosures as called for in Canadian Electrical Code
- ◆ Hot dip galvanized
- ◆ Other sizes on request

Cat No.	Mesh Spacing	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K10933</b>	6" x 6"	2800	1
<b>K10933-1</b>	6" x 3"	2700	1

# GROUNDING

## Ground Wire Moulding



- ◆ Extruded flexible polyethylene moulding
- ◆ Supplied in 8 ft. lengths and fastened to pole by staple K920-2
- ◆ Please specify black or gray

Cat. No	Wire Groove Dia. Inches	Length Feet	Shipping Wt. lbs (1000 ft.)	Std. Pkg
K9805P	1/2	8	60	1000 ft.

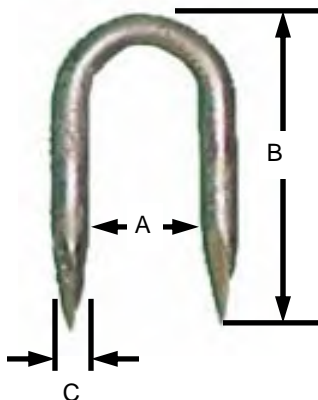
## Wood Moulding



Cat. No	Wire Groove Dia. Inches	Length Feet	Shipping Wt. lbs (1000 ft.)	Std. Pkg
K918	1/2	8	65	1000 ft.

- ◆ Treated with green wood preservative

## Staples



Cat. No	A Inches	B Inches	C Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K920-1	3/8	1-1/4	1/8	1	500
K920-2	11/16	2	3/16	3	500
K920-3	1-1/16	2	3/16	4	500
K920-4	3/4	3	No. 4 ga.	6	100
K920-5	1-1/16	3	No. 4 ga.	8	100
K920-6	2-3/8	3	.232	8	50

# GROUNDING

## Cable Guards

### PLAIN

- ◆ Larger sizes on request
- ◆ Steel galvanized or aluminum extruded
- ◆ \* For aluminum add "A" to Cat No.



Cat No.	Width Inches	Length Feet	Shipping Wt. lbs (100 pcs)	Std. Pkg
K48-3	1-1/4	3	264	5
K48-4	1-1/4	5	440	5
K48-5	1-1/4	8	760	5
K48-6	2-1/4	5	900	5
K48-7	2-1/4	8	1300	5
K48-8	3-1/4	5	1100	5
K48-9	3-1/4	8	2000	3
K48-10	3-3/4	5	1500	3
K48-11	3-3/4	8	2167	3
K48-12	4-3/8	8	2800	3
K48-13	5	5	1800	3
K48-14	5	8	3200	3
K48-15	6	5	2200	3
K48-16	6	8	3500	3

Cat No.	Width Inches	Length Feet	Shipping Wt. lbs (100 pcs)	Std. Pkg
K48-3F	1-1/4	3	276	5
K48-4F	1-1/4	5	460	5
K48-5F	1-1/4	8	840	5
K48-6F	2-1/4	5	940	5
K48-7F	2-1/4	8	1300	5
K48-8F	3-1/4	5	1540	5
K48-9F	3-1/4	8	1867	3
K48-10F	3-3/4	5	1520	5
K48-11F	3-3/4	8	2467	3

### FLARED

- ◆ Larger sizes on request
- ◆ Steel galvanized or aluminum extruded
- ◆ \*For aluminum add "A" to Cat No.



# GROUNDING

## Cable Guard Straps



Cat No.	Cable Guard Size Inches	Strap Size Inches	Hole Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K48-20</b>	3/4	1/8 x 3/4	9/32	12	100
<b>K48-21</b>	1-1/4	1/8 x 3/4	9/32	15	100
<b>K48-22</b>	2-1/4	1/8 x 3/4	9/32	25	100
<b>K48-23</b>	3-1/4	3/16 x 1	11/32	38	100
<b>K48-24</b>	3-3/4	3/16 x 1	11/32	70	100
<b>K48-25</b>	4-3/4	3/16 x 1	11/32	80	100
<b>K48-26</b>	5	3/16 x 1	11/32	100	100

- ◆ Steel galvanized
- ◆ \*For aluminum add "A" to Cat No.
- ◆ Larger sizes on request

## Throat Clips

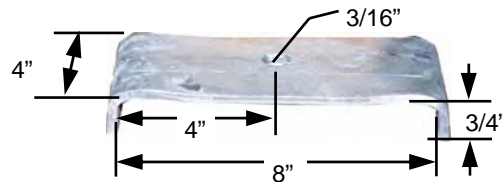
Cat No.	Radius Inches	Cable Guard Size Inches	Mounting Hole Size Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K48-29</b>	3/8	3/4	9/32	24	50
<b>K48-30</b>	5/8	1-1/4	9/32	26	25
<b>K48-31</b>	1	2-1/4	15/32	34	25
<b>K48-32</b>	1-5/8	3-1/4	7/16	60	25
<b>K48-33</b>	1-7/8	3-3/4	7/16	80	25



- ◆ Cast aluminum alloy
- ◆ Larger sizes on request

# CROSSARMS, BRACES AND GAINS

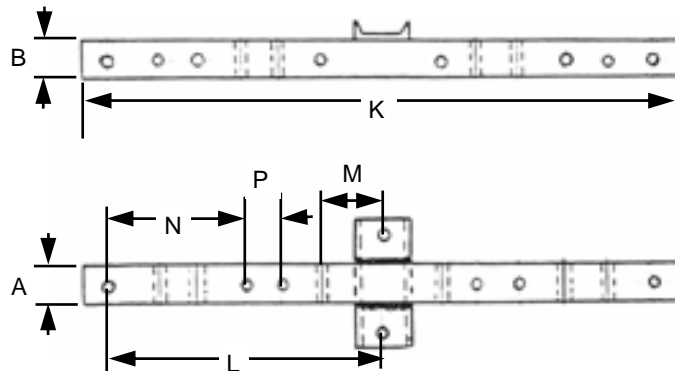
## Crossarm Reinforcing Plate



Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K9-1	438	8

- ◆ Formed from 1/4" x 4" steel plate with pressed rib vertically to give extra strength
- ◆ Clamps over side of crossarm to prevent checking or splitting at attachment point
- ◆ Hot dip galvanized
- ◆ Other sizes on request

## Hollow Steel Crossarms



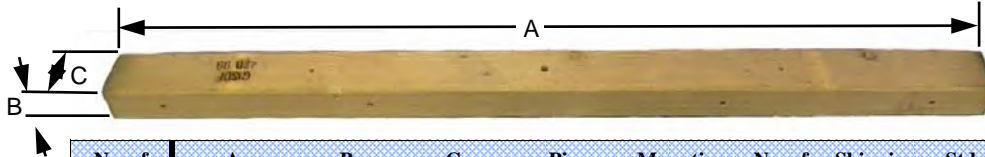
Cat No.	A Inches	B Inches	Thickness Inches	K Feet	L Feet	M Inches	N Inches	P Inches	Load lbs	Shipping Wt. lbs (100 pcs)	Std. Pkg
K7-1	4	4	.1500	5-1/2	2-1/2	—	15	—	3000	5500	1
K7-2	4	4	.3125	9-1/2	4-1/2	24	18	—	3500	15200	1
K7-3	6	4	.1880	7-1/2	3-1/2	24	18	—	4000	10300	1
K7-4	6	4	.3120	10-1/2	5	24	18	—	4000	21700	1
K7-5	6	4	.3750	12-1/2	6	24	18	18	4000	29800	1
K7-6	4	4	.1500	4' 10"	2' 2"	24	18	—	3000	4700	1
K7-7	4	4	.1880	7-1/2	3-1/2	24	18	—	4000	9000	1
K7-8	4	4	.3125	10-1/2	3-1/2	24	18	—	4000	16200	1

- ◆ Made from hollow H.S.S. (square or rectangular) tubing to C.S.A. M-81
- ◆ Dead ending for all applications
- ◆ Can be mounted on wood, concrete or steel poles
- ◆ All crossarms supplied with welded end caps to prevent bird nesting
- ◆ Hot dip galvanized after fabrication



# CROSSARMS, BRACES AND GAINS

## Wood Crossarms

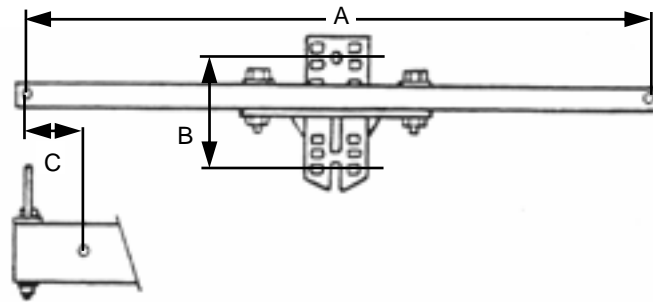


No. of Arm	A Feet & Inches	B Inches	C Inches	Pin Holes Inches	Mounting Hole Inches	No. of Pins	Shipping Wt. lbs (100 pcs)	Std. Pkg
20	2' 0"	2-3/4	3-3/4	1-1/4	11/16	2	500	1
21	3' 4"	3-3/4	4-3/4	1-1/2	11/16	2	1365	1
21D	3' 4"	3-3/4	4-3/4	9/16	11/16	2	1370	1
22	6' 10"	3-3/4	3-3/4	1-1/2	13/16	2	2210	1
22A	6' 10"	3-3/4	4-3/4	11/16	13/16	2	2805	1
22D	6' 10"	3-3/4	4-3/4	13/16	13/16	2	2800	1
25A	4' 11"	3-3/4	4-3/4	11/16	13/16	2	2015	1
25D	3' 10"	3-3/4	4-3/4	9/16	11/16	2	1575	1
28	3' 10"	3-3/4	4-3/4	1-1/2	11/16	2	1570	1
40	5' 0"	3-3/4	3-3/4	1-1/4	11/16	4	1620	1
41	5' 6"	3-3/4	4-3/4	1-1/2	11/16	4	2255	1
41D	5' 6"	3-3/4	4-3/4	9/16	11/16	4	2260	1
42	6' 4"	3-3/4	4-3/4	1-1/2	11/16	4	2500	1
42D	6' 4"	3-3/4	4-3/4	9/16	11/16	4	2505	1
43	9' 10"	3-3/4	4-3/4	1-1/2	13/16	4	3800	1
43A	9' 10"	3-3/4	4-3/4	11/16	13/16	4	3810	1
43D	9' 10"	3-3/4	4-3/4	13/16	13/16	4	3805	1
44	8' 4"	3-3/4	4-3/4	1-1/2	11/16	4	3200	1
44D	8' 4"	3-3/4	4-3/4	9/16	11/16	4	3205	1
60	7' 0"	3-1/4	3-1/4	1-1/4	11/16	6	1700	1
61	7' 8"	3-3/4	4-3/4	1-1/2	11/16	6	3140	1
61D	7' 8"	3-3/4	4-3/4	9/16	11/16	6	3145	1
62	9' 4"	3-3/4	4-3/4	1-1/2	11/16	6	3600	1
62D	9' 4"	3-3/4	4-3/4	9/16	11/16	6	3605	1
80	9' 0"	3-1/4	4-1/4	1-1/4	11/16	8	2860	1
81	9' 10"	3-3/4	4-3/4	1-1/2	11/16	8	3800	1
81D	9' 10"	3-3/4	4-3/4	9/16	13/16	8	3805	1

- ◆ Where 9/16" holes are required for 1/2" dia. steel pins add suffix D to Cat. No
- ◆ For larger dia. steel pins specify when ordering
- ◆ Made of No. 1 B.C Fir coastal grade
- ◆ Order by number
- ◆ Add D1 for 11/16" holes

# CROSSARMS, BRACES AND GAINS

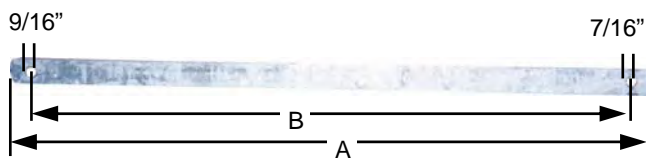
## Steel Crossarms



- ◆ Made from heavy duty channel steel with malleable crossarm gain an integral part
- ◆ Wood pole mounting
- ◆ \*Add suffix "CS" to Cat No. for concrete or steel poles
- ◆ All parts supplied except mounting bolts
- ◆ All parts hot dip galvanized
- ◆ Other sizes on request

Cat No.	A Inches	B Inches	C Inches	Shipping Wt. lbs	Std. Pkg
K24-1	30	8	4	2900	1
K24-2	40	8	4	3500	1
K24-3	52	8	4	4100	1

## Flat Steel Crossarm Brace

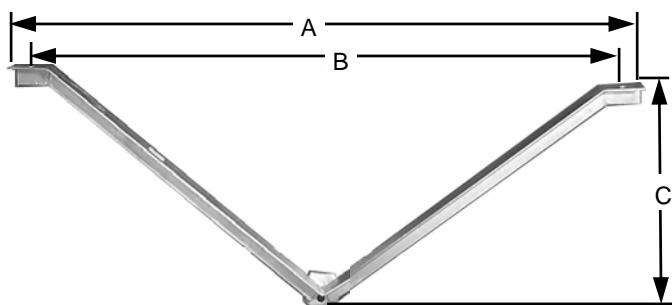


- ◆ C.S.A. standard
- ◆ Flat rolled steel bar
- ◆ Hot dip galvanized
- ◆ Special sizes on request

Cat. No.	A Inches	B Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K11-1	18	16	112	10
K11-2	20	18	128	25
K11-3	22	20	144	25
K11-4	24	22	160	25
K11-5	26	24	176	25
K11-6	28	26	192	25
K11-7	30	28	208	25
K11-8	32	30	212	25
K11-9	34	32	232	25
K11-10	36	34	248	25
K11-11	40	38	280	25

# CROSSARMS, BRACES AND GAINS

## Crossarm Brace Angle Arm

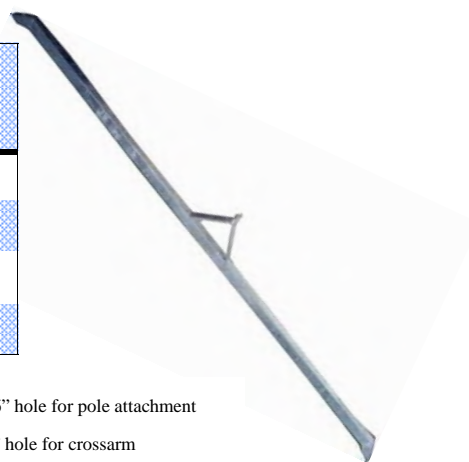


- ◆ Provides rigid support for heavy crossarms
- ◆ 4 spurs ensure positive positioning on wood or concrete poles
- ◆ Provided with shoulders to ensure positive locking of mounting bolt
- ◆ 9/16" holes for mounting to crossarms
- ◆ 11/16" hole for pole mounting
- ◆ Steel, hot dip galvanized
- ◆ Other sizes on request

Cat No.	Size of Angle Inches	A Inches	B Inches	C Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K13-1	1-1/2 x 1-1/2 x 3/16	45	42	12	830	5
K13-2	1-1/2 x 1-1/2 x 3/16	51	48	18	1000	5
K13-3	1-1/2 x 1-1/2 x 3/16	63	60	18	1160	5
K13-4	1-1/2 x 1-1/2 x 3/16	75	72	22	1300	5
K13-5	1-3/4 x 1-3/4 x 3/16	63	60	18	1330	5
K13-6	1-3/4 x 1-3/4 x 3/16	69	66	20	1500	5
K13-7	1-3/4 x 1-3/4 x 3/16	75	72	22	1540	5

## Angle Alley Arm Brace

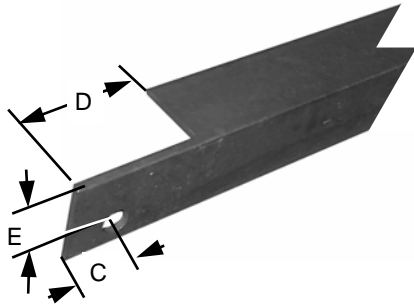
Cat No.	Size of Angle Inches	Length Feet	Shipping Wt. lbs (100 pcs)	Std. Pkg
K14-1	1-1/2 x 1-1/2 x 3/16	5	1100	1
K14-2	1-1/2 x 1-1/2 x 3/16	6	1300	5
K14-3	1-1/2 x 1-1/2 x 3/16	7	1465	5
K14-4	1-3/4 x 1-3/4 x 3/16	7	2100	5



- ◆ C.S.A. Standard
- ◆ Made from steel angle with linemen's step
- ◆ Used to support distribution conductors on one side of pole
- ◆ 11/16" hole for pole attachment
- ◆ 9/16" hole for crossarm
- ◆ Hot dip galvanized

# CROSSARMS, BRACES AND GAINS

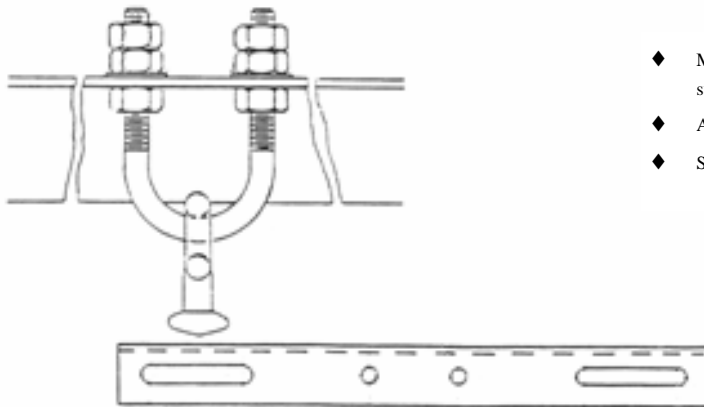
## Crossarm Brace - Angle Steel



- ◆ For all types of poles
- ◆ Hot dip galvanized
- ◆ Other sizes available on request

Cat No.	Size of Angle Inches	Total Length Feet & Inches	Centre to Center Feet & Inches	C Inches	D Inches	E Inches	Hole Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K15-1</b>	1-1/2 x 1-1/2 x 1/8	4' 5"	4' 3"	1	3	3/4	9/16	540	5
<b>K15-2</b>	1-1/2 x 1-1/2 x 1/8	5' 2"	5'	1	3	3/4	9/16	640	5
<b>K15-3</b>	3 x 3 x 1/4	8' 8-5/16"	8' 5-5/16"	1-1/2	4-1/2	2	13/16	4250	1

## Double Arm Angle Support

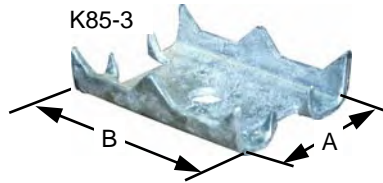


- ◆ Mounted on underside of wood or steel crossarms to support suspension assemblies up to maximum of 45°
- ◆ All parts hot dip galvanized
- ◆ Supplied as shown

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K77-1</b>	750	5

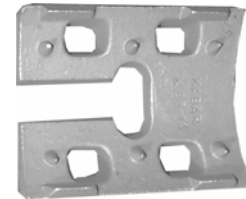
# CROSSARMS, BRACES AND GAINS

## Spiked Crossarm Gains



- ◆ For pole crossarms or spar connection for 3/4" bolts
- ◆ Made from 1/4" steel plate
- ◆ Used at junction of wood poles, spars or timbers to provide good bearing surfaces and to increase allowable physical load
- ◆ To attain a good bearing surface, gains must be seated securely
- ◆ All gains hot dip galvanized

Slotted



K85-1A

Cat No.	Pole Dia. Inches	A Inches	B Inches	Max. Bolt Dia. Inches	Hole Shape	Material	Shipping Wt. lbs (100 pcs)	Std. Pkg
K85-1A	Any	4	5	3/4	T-Slot	Aluminum	90	40
K85-2	5 to 10	4	6	7/8	Round	Steel	220	25
K85-3	6 to 12	4-5/8	6	7/8	Round	Steel	152	25
K85-4	8 to 15	5	6	7/8	Round	Steel	260	25
K85-5	Any	4	4	7/8	Oval	Malleable	150	25

## Crossarm Gains

Cat No.	Pole Arm Dia. Range Inches	Max. Bolt Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K115-1	6 - 12	1	530	10
K117-1	8 - 12	1	320	10

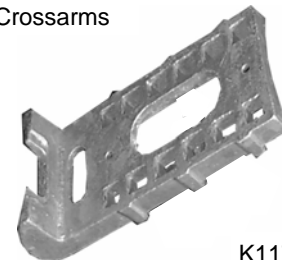
- ◆ Tapped 3/8" hole for ground attachment
- ◆ For use with round distribution and transmission arms
- ◆ Eliminates wood-to-wood contact and lessens probability of decay
- ◆ Pole arm contacts face and shelf surfaces of Gain - lower portion of Gain offers "wedge" against overturn and vertical movement. Thru bolt in tension in which it is strongest - not shear
- ◆ Thru bolt always passes through diametric center of pole arm eliminating costly field drilling
- ◆ Only one attachment bolt required
- ◆ One piece will accept range of pole arm diameters



Round Crossarms

K115-1

Square Crossarms



K117-1

# CROSSARMS, BRACES AND GAINS

## Adjustable Thrust Fitting

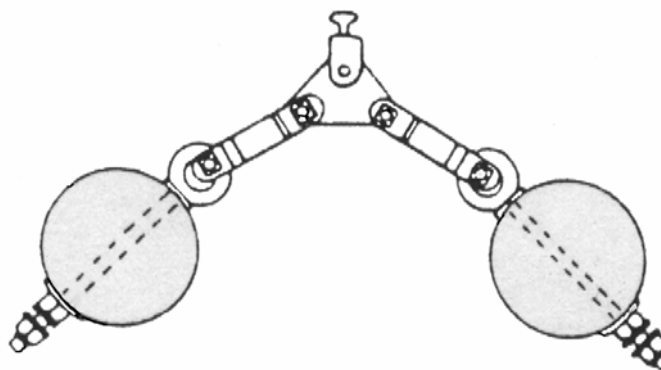


Cat No.	Description	Shipping Wt. lbs (100 pcs)	Std. Pkg
K85-15	Complete fitting 5/16" material (except 3/4" through bolt)	1800	2

- ◆ On Gulfport Structures, Kabar Adjustable Thrust Fittings join phase to support spars
- ◆ The following items must be ordered separately: assembly bolts, curved washers and lock nuts

## Centre Phase Assembly

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K114	600	1

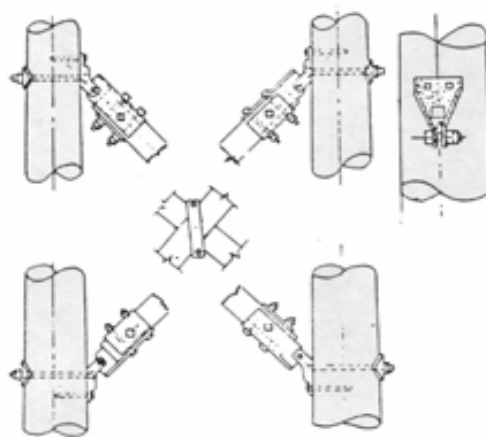


- ◆ On Gulfport structures the Kabar Centre Phase Assembly supports the middle insulator string
- ◆ Supplied, hot dip galvanized yoke plate, two clevis links and ball clevis fitting
- ◆ Order separately, shoulder eye bolts, curved washers and lock nuts



# CROSSARMS, BRACES AND GAINS

## Cross Bracing Hardware

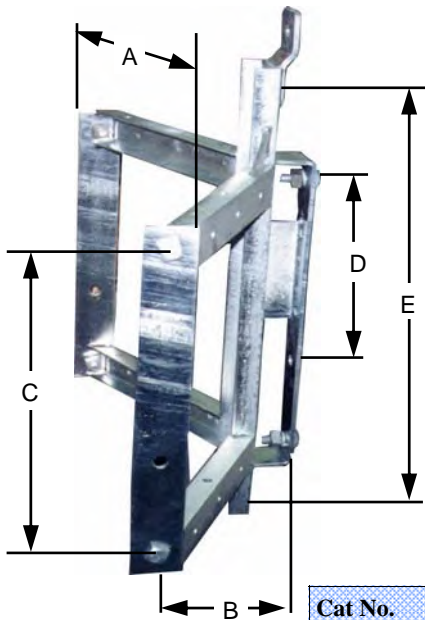


- ◆ For H-frame construction, use Kabar Cross Bracing Hardware and insure a well balanced and mechanically strong structure
- ◆ Supplied as a unit, required fitting, washers, lag bolts and lock nuts for bracing one structure
- ◆ Through bolts must be ordered separately (3/4 " dia. ) so that proper length may be supplied

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K111	7700	1

# TRANSFORMER BRACKETS

## Transformer Cluster Mounting Bracket

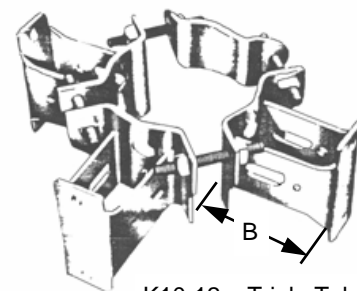


- ◆ Rigid V-shaped construction
- ◆ Lifting eyes provided for raising with bracket or complete with two outer transformers in place.
- ◆ Holes are provided for attaching bracing bolts. Bolts for pole mounting not included
- ◆ Cluster mounting bracket complete with 6 adapter plates.
- ◆ Stabilizing braces are recommended for K10-3 & K10-6
- ◆ Hot dip galvanized

Cat No.	A Inches	B Inches	C Inches	D Inches	E Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K10-1</b>	29-7/8	11-3/8	15	15	23-1/2	40	1 set
<b>K10-3</b>	34-1/4	12-7/8	22	15	30-1/2	65	1 set
<b>K10-6</b>	34-3/8	12-1/8	29	22	37-1/2	100	1 set

Single and Triple Take Off

Cat No.	Take Off	B Inches	Shipping Wt. lbs (100 Pcs)	Std. Pkg
<b>K10-10</b>	Single	9	2200	1 set
<b>K10-12</b>	Triple	9	4500	1 set

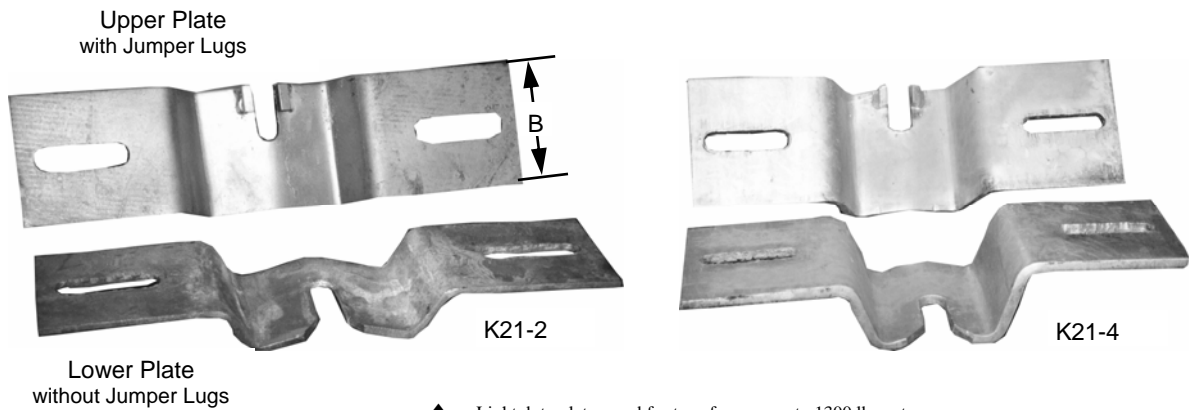


K10-12 Triple Take Off



# TRANSFORMER BRACKETS

## Transformer Adapter Plates



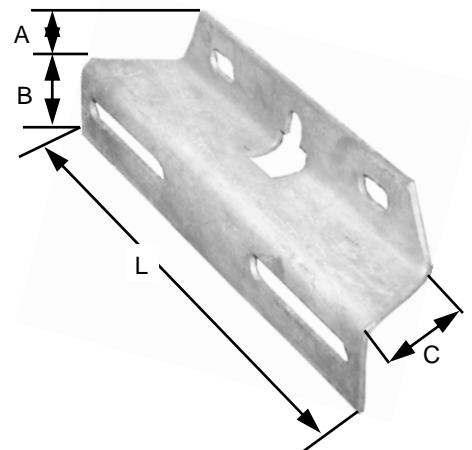
- ◆ Light duty plates used for transformers up to 1300 lbs. wt.
- ◆ Heavy duty plates for transformers up to 2200 Lbs
- ◆ Two plates required (upper and lower) for each transformer installation

Cat No.	Duty	Plate Thickness Inches	B Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K21-2	Light	1/4	4	900	5 Sets
K21-4	Heavy	7/16	5	1100	5 sets

## Transformer Mounting Plate

Cat No.	A Inches	B Inches	C Inches	L Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K21-6	2-1/2	3	2-3/4	9	2400	3

- ◆ Mounting plate (two required) are used to mount transformers directly to pole, eliminating wood cross-arms and transformer hangers
- ◆ Hot dip galvanized





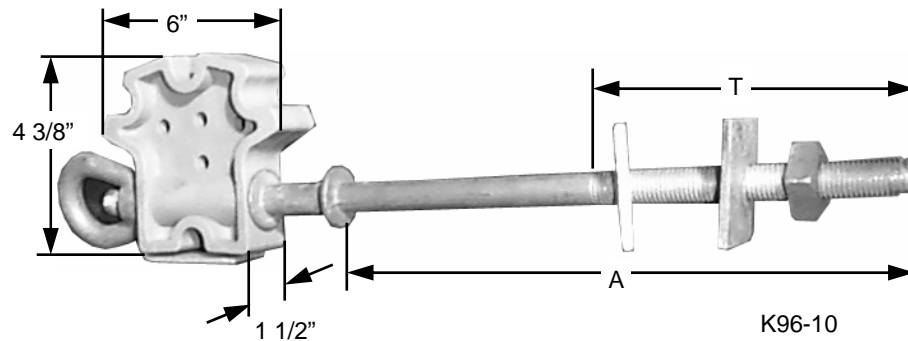
# BRACKETS

## Spreader Brackets

- ◆ Messenger clamp - formed flat bar steel 1/8" x 1 5/16"
- ◆ Carriage bolt comes with 2" long stand off collar
- ◆ Double Upset Spool bolt comes with 2 - 2 1/4" square washers and 5/8" square nut
- ◆ Insulator- grey plastic with ultra-violet inhibitors
- ◆ All ferrous parts hot dip galvanized
- ◆ Max. vertical load - 2,000 lbs
- ◆ 5/8" oval eye nut

with Carriage Bolt - 5/8" x 7"

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K96-07	180	10



with Double Upset Spool Bolt

Cat No.	A Inches	T Inches	Shipping Wt. lbs (100 pcs)	Std Pkg.
K96-8	8	5	250	10
K96-10	10	6	275	10
K96-12	12	6	300	10
K96-14	14	6	325	10
K96-16	16	6	350	10

# BRACKETS

## Secondary Mid-Span Brackets



- ◆ Insulating bar is high strength fiberglass reinforced polyester resin - ultra-violet stabilized
- ◆ \*Cast aluminum or cast copper alloy conductor clamp
- ◆ Pull ring rods are rigid steel rod
- ◆ Pull ring holders flat steel rigid bar
- ◆ 3/8" bolts, nuts and washers
- ◆ Pull ring rods, holders and bolts, nuts and washers are hot dip galvanized
- ◆ Connectors will accept wire size #2-477
- ◆ Other spacings available upon request

### 3 Wire

Single Drop Wire Support

Cat No.	A Inches	Bar Size Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K95-3-7	7	3/8 x 1-1/4	200	10
K95-3-8	8	3/8 x 1-1/4	210	10
K95-3-13	13	3/8 x 1-1/4	285	10

Double Drop Wire Support

Cat No.	A Inches	Bar Size Inches	Shipping Wt. lbs	Std. Pkg
K94-3-7	7	3/8 x 1-1/4	210	10
K94-3-8	8	3/8 x 1-1/4	220	10
K94-3-13	13	3/8 x 1-1/4	290	10

### 4 Wire

Single Drop Wire Support

Cat No.	A Inches	Bar Size Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K95-4-7	7	3/8 x 1-1/2	230	10
K95-4-8	8	3/8 x 1-1/2	240	10
K95-4-13	13	3/8 x 1-1/2	310	10

Double Drop Wire Support

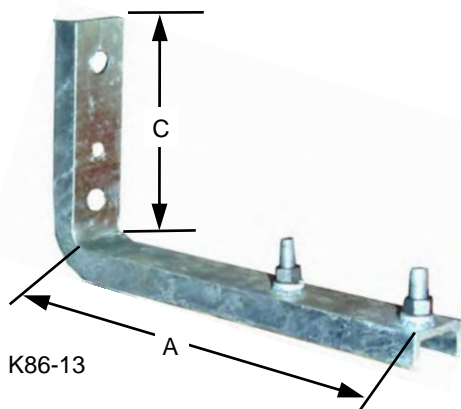
Cat No.	A Inches	Bar Size Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K94-4-7	7	3/8 x 1-1/2	240	10
K94-4-8	8	3/8 x 1-1/2	250	10
K94-4-13	13	3/8 x 1-1/2	320	10



# ARRESTER BRACKETS

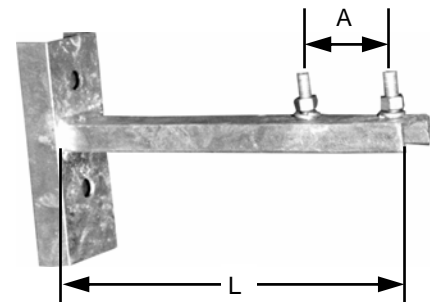
## Cutout - Arrester Combination Brackets

### Single Phase



Cat. No	A Inches	C Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K86-6	6	8	300	20
K86-8	8-3/4	8	380	25
K86-13	12-3/4	8	450	10

Cat No.	L Inches	A Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K87-6	6	specify	300	5
K87-13	13-1/2	3-1/4	600	6
K87-18	18	3-1/4	640	4



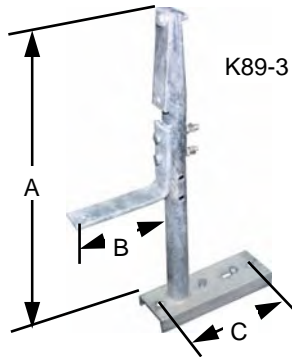
Cat No.	L Inches	A Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K83-19	19	10	360	5
K83-23	23-1/2	13	420	5

# ARRESTER BRACKETS

## Cutout - Arrester Combination Brackets

(27 KV Series)

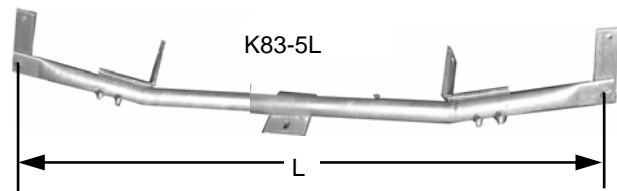
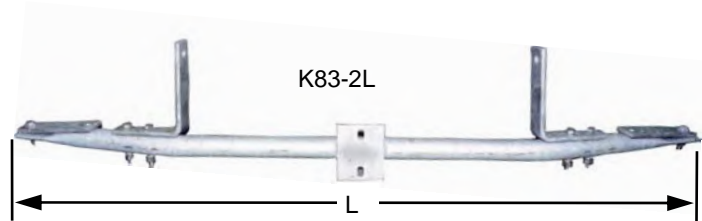
Single Phase



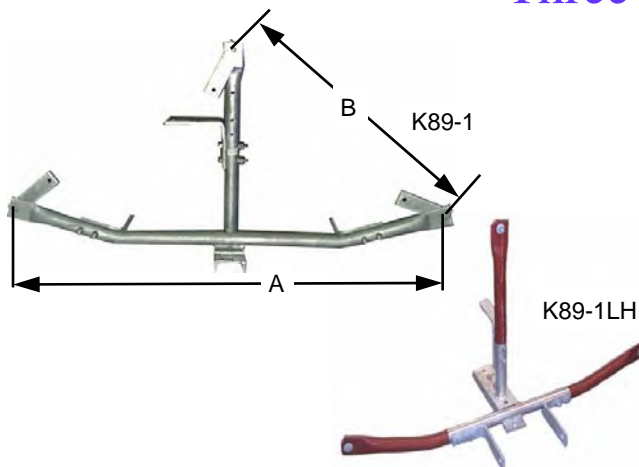
Cat No.	A Inches	B Inches	C Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K89-3</b>	27-1/2	8-3/8	6	800	1
<b>K89-3CA</b>	27	-	-	800	1

Two Phase

Cat No.	L Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K83-2</b>	60	3000	1
<b>K83-2L</b>	59	2700	1
<b>K83-5</b>	60	3000	1
<b>K83-6</b>	60	3000	1
<b>K83-5L</b>	54	2700	1



Three Phase



Cat No.	A Inches	B Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K89-1</b>	59	38	3000	1
<b>K89-2</b>	59	38	3000	1
<b>K89-1LH</b>	59	38	3000	1

- ◆ K89-1 consists of K89-3 with K83-5L
- ◆ K89-2 consists of K89-3 with K83-2L
- ◆ K89-1LH has rubber coating as shown
- ◆ Hot dip galvanized



# BOLTS, NUTS AND WASHERS

## Machine Bolts



Silicon Bronze Bolt

◆ Add suffix SB to Cat No.

3/8" Diameter Bolts

Cat No.	Length Inches	Thread Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K305-2	2	1-3/4	11	100
K305-3	3	2-3/4	13.1	100
K305-4	4	3	15	50
K305-4.5	4-1/2	3	17.1	50
K305-5	5	3	18.2	50
K305-5.5	5-1/2	3	20	50
K305-6	6	3	20.8	50
K305-7	7	4	23.8	50
K305-8	8	4	26.8	50
K305-10	10	4	31.8	50

1/2" Diameter Bolts

Cat No.	Length Inches	Thread Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K306-1.5	1-1/2	1-1/4	18.4	50
K306-2	2	1-3/4	20.4	50
K306-2.5	2-1/2	2-1/4	23.2	50
K306-3	3	2-3/4	25	50
K306-4	4	3	30.8	25
K306-4.5	4-1/2	3	32.4	25
K306-5	5	3	36	25
K306-6	6	3	40.5	25
K306-7	7	4	47.5	25
K306-8	8	4	50	25
K306-9	9	4	57	50
K306-10	10	6	60	50
K306-12	12	6	70	50
K306-14	14	6	79	50
K306-16	16	6	88.8	50

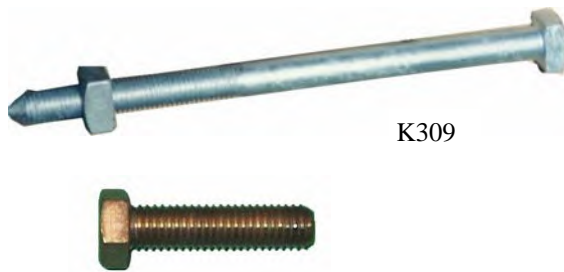
- ◆ C.S.A Standard
- ◆ 1/2" Bolts, 8" and longer furnished with cone points
- ◆ Supplied with square nut
- ◆ Hot dip galvanized
- ◆ Add "H" for Hex Head



# BOLTS, NUTS AND WASHERS

## Machine Bolts

- ◆ C.S.A Standard
- ◆ Bolts 8" and longer furnished with cone points
- ◆ Supplied with square nut
- ◆ Hot dip galvanized
- ◆ Add "H" for Hex Head



K309

Silicon Bronze Bolt

- ◆ Add suffix SB to Cat No.

### 5/8" Diameter Bolts

Cat No.	Length Inches	Thread Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K307-7	7	4	78	25
K307-8	8	4	86	25
K307-9	9	4	94	25
K307-10	10	4	102	25
K307-12	12	6	115	25
K307-14	14	6	130	25
K307-16	16	6	145	25
K307-18	18	6	160	25
K307-20	20	6	175	25
K307-22	22	6	190	25
K307-24	24	6	209	25
K307-26	26	6	226	25

### 3/4" Diameter Bolts

Cat No.	Length Inches	Thread Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K308-8	8	4	130	25
K308-10	10	6	150	25
K308-12	12	6	175	25
K308-14	14	6	200	25
K308-16	16	6	225	25
K308-18	18	6	245	25
K308-20	20	6	270	25
K308-22	22	6	300	25
K308-24	24	6	320	25
K308-26	26	6	340	25
K308-28	28	6	360	25

### 7/8" Diameter Bolts

Cat No.	Length Inches	Thread Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K309-18	18	6	359	25
K309-20	20	6	395	25
K309-22	22	6	430	25
K309-24	24	6	465	25
K309-26	26	6	495	25
K309-28	28	6	530	25
K309-30	30	6	560	25
K309-32	32	6	600	25
K309-34	34	6	635	25
K309-36	36	6	760	25



# BOLTS, NUTS AND WASHERS

## Double Arming Bolts

5/8" Diameter

Cat No.	Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K316-10	10	124	25
K316-12	12	138	25
K316-14	14	152	25
K316-16	16	165	25
K316-18	18	180	25
K316-20	20	195	25
K316-22	22	210	25
K316-24	24	225	25
K316-26	26	252	25
K316-28	28	260	25
K316-30	30	270	25



3/4" Diameter

Cat No.	Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K317-12	12	230	25
K317-14	14	250	25
K317-16	16	270	25
K317-18	18	290	25
K317-20	20	310	25
K317-22	22	330	25
K317-24	24	350	25
K317-26	26	370	25
K317-28	28	390	25
K317-30	30	410	25

- ◆ C.S.A standard
- ◆ Full thread
- ◆ 4 nuts per bolt
- ◆ Both ends cone pointed
- ◆ Hot dip galvanized

## Carriage Bolts

3/8" Diameter

Cat No.	Length Inches	Thread Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K311-3	3	1	13	100
K311-3.5	3 -1/2	1	15	100
K311-4	4	1	16	100
K311-4.5	4 -1/2	1	17	100
K311-5	5	1	19	100
K311.5.5	5 -1/2	1	20	100
K311-6	6	1	24	100



1/2" Diameter

Cat No.	Length Inches	Thread Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K312-3	3	1 -1/4	25	100
K312-3.5	3 -1/2	1 -1/4	28	100
K312-4	4	1 -1/4	32	100
K312-4.5	4 -1/2	1 -1/4	33	100
K312-5	5	1 -1/4	35	100
K312.5.5	5 -1/2	1 -1/4	38	100
K312-6	6	1 -1/4	42	100

- ◆ C.S.A. Standard
- ◆ Drop forged steel
- ◆ Hot dip galvanized
- ◆ Full thread upon request





# BOLTS, NUTS AND WASHERS

## Oval Eye Bolts

5/8" Diameter

Cat No.	Length Inches	Thread Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K321-6	6	3	122	25
K321-8	8	4	136	25
K321-10	10	4	150	25
K321-12	12	6	168	25
K321-14	14	6	186	25
K321-16	16	6	204	25
K321-18	18	6	222	25
K321-20	20	6	250	25
K321-22	22	6	270	25

3/4" Diameter

Cat No.	Length Inches	Thread Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K322-6	6	3	185	25
K322-8	8	4	205	25
K322-10	10	4	225	25
K322-12	12	6	250	25
K322-14	14	6	275	25
K322-16	16	6	295	25
K322-18	18	6	320	25
K322-20	20	6	345	25
K322-22	22	6	370	25



- ◆ Oval eyes are drop forged
- ◆ Lengths are measured under eye
- ◆ Eye bolts are cone pointed
- ◆ Inside eye 1 1/2" x 2"

## Double Arming Oval Eye Bolts

5/8" Diameter

Cat No.	Length Inches	Thread Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K323-14	14	12	212	20
K323-16	16	14	224	20
K323-18	18	16	240	20
K323-20	20	18	252	20
K323-22	22	20	282	20
K323-24	24	22	320	20
K323-26	26	24	350	20
K323-28	28	26	375	20

3/4" Diameter

Cat No.	Length Inches	Thread Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K324-16	16	14	304	20
K324-18	18	16	330	20
K324-20	20	18	370	20
K324-22	22	20	384	15
K324-24	24	22	390	15
K324-26	26	24	425	15
K324-28	28	26	460	15
K324-30	30	28	493	15
K324-32	32	30	530	10



- ◆ C.S.A. standard
- ◆ Oval eyes are drop forged
- ◆ Lengths are measured under eye
- ◆ Eye bolts are cone pointed
- ◆ Inside eye 1 1/2" x 2"
- ◆ 4 nuts per bolt

# BOLTS, NUTS AND WASHERS

## Straight Thimble Eye Bolts



5/8" Diameter

Cat No.	Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K329-8	8	205	25
K329-10	10	225	25
K329-12	12	250	25
K329-14	14	275	25
K329-16	16	295	25
K329-18	18	320	25
K329-20	20	345	25

- ◆ C.S.A. standard
- ◆ Drop forged steel cone pointed
- ◆ Threads are 6" long
- ◆ Each bolt supplied with one nut
- ◆ Hot dip galvanized

3/4" Diameter

Cat No.	Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K330-10	10	210	25
K330-12	12	235	25
K330-14	14	260	25
K330-16	16	285	25
K330-18	18	310	25
K330-20	20	330	25

## Angle Thimble Eye Bolts



5/8" Diameter

Cat No.	Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K332-8	8	130	25
K332-10	10	148	25
K332-12	12	166	25
K332-14	14	184	25
K332-16	16	202	25
K332-18	18	220	25
K332-20	20	238	25

- ◆ C.S.A. standard
- ◆ Drop forged steel cone pointed
- ◆ Hot dip galvanized
- ◆ Thread length is 6" min.
- ◆ Each bolt supplied with one nut
- ◆ Bent at 45° angle

3/4" Diameter

Cat No.	Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K333-10	10	200	25
K333-12	12	225	25
K333-14	14	250	25
K333-16	16	275	25
K333-18	18	300	25
K333-20	20	330	25

# BOLTS, NUTS AND WASHERS

## Shoulder Eye Bolts

5/8" Diameter



3/4" Diameter

Cat No.	Length Inches	Thread Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K325-8</b>	8	4	185	25
<b>K325-10</b>	10	4	200	25
<b>K325-12</b>	12	6	216	25
<b>K325-14</b>	14	6	230	25
<b>K325-16</b>	16	6	246	25
<b>K325-18</b>	18	6	262	25

- ◆ Length measured under shoulder
- ◆ C.S.A. Standard
- ◆ Drop forged steel

Cat No.	Length Inches	Thread Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K326-8</b>	8	4	212	25
<b>K326-10</b>	10	4	224	25
<b>K326-12</b>	12	6	240	25
<b>K326-14</b>	14	6	252	25
<b>K326-16</b>	16	6	282	25
<b>K326-18</b>	18	6	320	25
<b>K326-20</b>	20	6	350	25

- ◆ One square nut
- ◆ Hot dip galvanized

## Ball Link Shoulder Eye Bolts

5/8" Diameter



3/4" Diameter

Cat No.	Length Inches	Thread Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K327-8</b>	8	4	185	25
<b>K327-10</b>	10	4	200	25
<b>K327-12</b>	12	6	217	25
<b>K327-14</b>	14	6	231	25
<b>K327-16</b>	16	6	246	25
<b>K327-18</b>	18	6	263	25

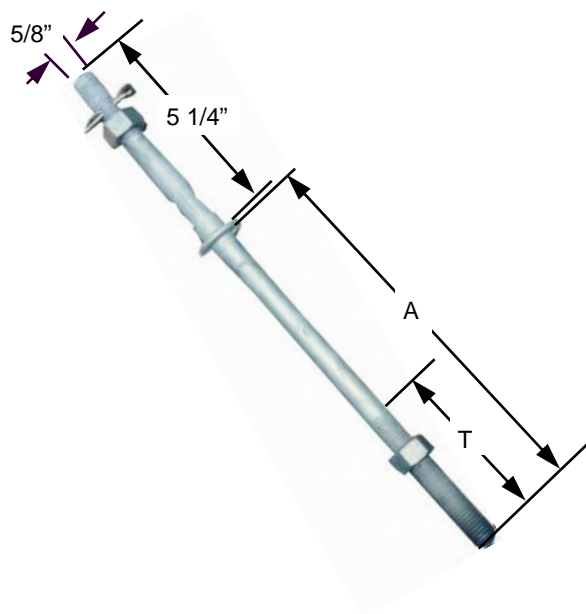
- ◆ C.S.A. standard
- ◆ Linkeye and shoulder bolt are drop forged
- ◆ One square nut

Cat No.	Length Inches	Thread Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K328-8</b>	8	4	212	25
<b>K328-10</b>	10	4	224	25
<b>K328-12</b>	12	6	240	25
<b>K328-14</b>	14	6	252	25
<b>K328-16</b>	16	6	282	25
<b>K328-18</b>	18	6	320	25
<b>K328-20</b>	20	6	352	25

- ◆ Provides flexible joint for dead ending on suspension attachment
- ◆ Hot dip galvanized

# BOLTS, NUTS AND WASHERS

## Single Upset Spool Bolts

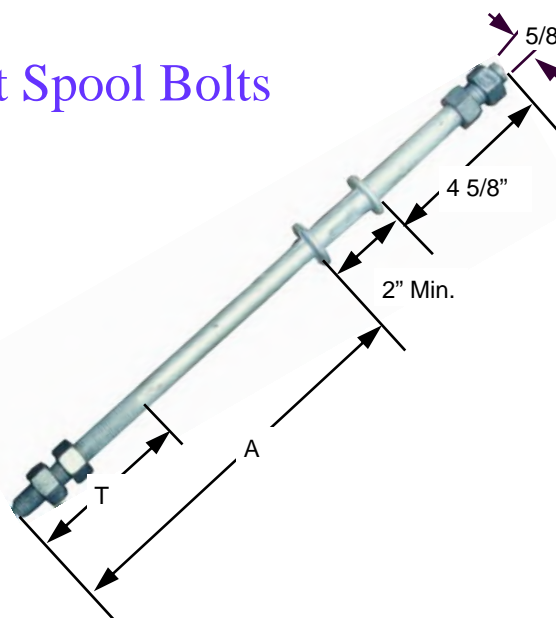


Cat No.	A Inches	T Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K126-8</b>	8	4	140	25
<b>K126-10</b>	10	6	160	25
<b>K126-12</b>	12	6	180	25
<b>K126-14</b>	14	6	200	25
<b>K126-16</b>	16	6	220	25

- ◆ C.S.A. standard
- ◆ Drop forged steel
- ◆ Supplied complete as shown
- ◆ Used to support neutral wire in rural or light construction
- ◆ Spool insulator to be ordered separately
- ◆ Wrench flats provided on shank
- ◆ Cotter pin hole located 4 1/8" from the shoulder
- ◆ Hot dip galvanized

## Double Upset Spool Bolts

Cat No.	A Inches	T Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K126-8D</b>	8	4	150	25
<b>K126-10D</b>	10	6	170	25
<b>K126-12D</b>	12	6	190	25
<b>K126-14D</b>	14	6	210	25
<b>K126-16D</b>	16	6	230	25





# BOLTS, NUTS AND WASHERS

## Square Nuts

Cat No.	Bolt Size Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K4-1	3/8	3	100
K4-2	1/2	10	50
K4-3	5/8	11.5	200
K4-4	3/4	23.5	150
K4-5	7/8	46	50
K4-6	1	50	50



K4-1



K5-1

## Hexagon Nuts

Cat No.	Bolt Size Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K5-1	3/8	3	100
K5-2	1/2	10	50
K5-3	5/8	11.5	200
K5-4	3/4	23.5	150
K5-5	7/8	46	50
K5-6	1	50	50

- ◆ C.S.A. Standard
- ◆ Made from grade "A" steel

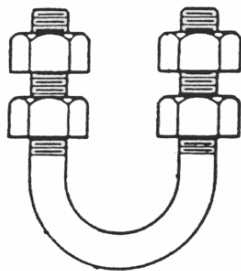
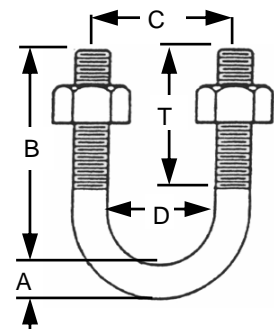
- ◆ Hot dip galvanized
- ◆ Tapped UNC thread over size

## U Bolts

- ◆ \*Specify if required black or hot dip galvanized and number of nuts required (hex or square)
- ◆ Please accompany order with a sketch showing dimensions A,B,C,D & T

### Standard Type

- ◆ Used in a vast variety of applications



### Medium Type

- ◆ Used extensively on tower arms and other steel structures for attaching insulator strings

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K120*	63	50

## Strand Eye Nuts

Cat No.	Bolt Dia. Inches	Minimum Strength lbs	Shipping Wt. lbs (100 pcs)	Std. Pkg
K498-1	1/2	7700	90	25
K498-2	5/8	12400	84	50
K498-3	3/4	18300	82	25

- ◆ Drop forged steel
- ◆ Hot dip galvanized
- ◆ Used for span & single head guying



# BOLTS, NUTS AND WASHERS

## Bolt Eyes



Cat No.	Bolt Dia. Inches	Bolt Hole Inches	Inside Eye Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K499-1*	3/4	13/16 x 1	1 -1/4 x 3	125	50
K499-2*	5/8	11/16 x 1	1 -1/4 x 3	125	50

- ◆ \* Add "F" for Drop Forged
- ◆ Bolt can be inserted at an angle as hole is elongated
- ◆ Used for dead-ending on crossarms
- ◆ Hot dip galvanized

## Oval Eye Nuts

Cat No.	Bolt Dia. Inches	Strength lbs	Shipping Wt. lbs (100 pcs)	Std. Pkg
K450-1	1/2	7700	47	50
K450-2	5/8	12400	60	50
K450-3	3/4	18300	60	50



- ◆ Used for dead ending suspension insulators
- ◆ Drop forged steel
- ◆ Hot dip galvanized

## Angle Thimble Eyelet

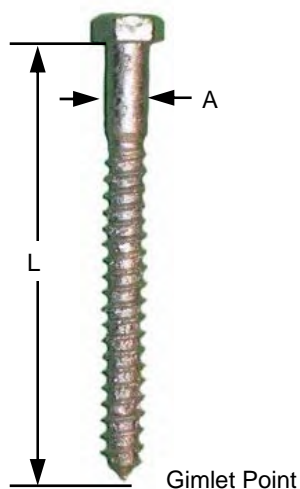


Cat No.	Bolt Dia. Inches	Strand Dia. Inches	Strength lbs	Shipping Wt. lbs (100 pcs)	Std. Pkg
K496-1	11/16	3/16 TO 1/2	12400	134	50
K496-2	13/16	3/16 TO 1/2	18300	128	50

- ◆ Drop forged steel
- ◆ Bent at 45° angle
- ◆ Used to assemble upper end of guy on ground
- ◆ Hot dip galvanized

# BOLTS, NUTS AND WASHERS

## Lag Screws



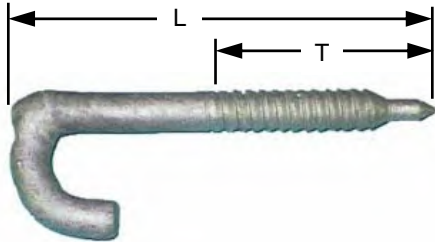
- ◆ Lag screws are furnished with pilot point, gimlet point or fetter drive
- ◆ Hot dip galvanized

\*Add suffix "F" to Cat. No for Fetter drive, "G" for Gimlet point, "P" for Pilot point

Cat. No	A Inches	L Inches	Min. Thread Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K335-2	1/4	2	1-1/2	3	100
K335-2.5	1/4	2-1/2	1-3/4	4	100
K335-3	1/4	3	2	6	100
K335-3.5	1/4	3-1/2	2-1/4	7	100
K335-4	1/4	4	2-1/2	8	100
K336-2.5	5/16	2-1/2	1-3/4	6	100
K336-3	5/16	3	2	7	100
K336-3.5	5/16	3-1/2	2-1/4	8	100
K337-2.5	3/8	2-1/2	1-3/4	9	100
K337-3	3/8	3	2	11	100
K337-3.5	3/8	3-1/2	2-1/4	12	100
K337-4	3/8	4	2-1/2	13	100
K337-4.5	3/8	4-1/2	2-3/4	15	100
K338-2.5	1/2	2-1/2	1-3/4	17	100
K338-3	1/2	3	2	20	100
K338-3.5	1/2	3-1/2	2-1/4	22	100
K338-4	1/2	4	2-1/2	25	100
K338-4.5	1/2	4-1/2	2-3/4	28	100
K338-5	1/2	5	3	30	100
K338-6	1/2	6	3-1/2	35	100
K339-4	5/8	4	2-1/2	38	100
K339-5	5/8	5	3	46	100
K339-6	5/8	6	3-1/2	54	100

# BOLTS, NUTS AND WASHERS

## Pilot Point Drive Hook



Cat. No	Dia. of Steel Inches	L Inches	T Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K124	7/16	5-1/2	2-1/2	31	50

- ◆ Hot dip galvanized
- ◆ Made of high strength steel
- ◆ Easy Installation
- ◆ Flat surface for driving

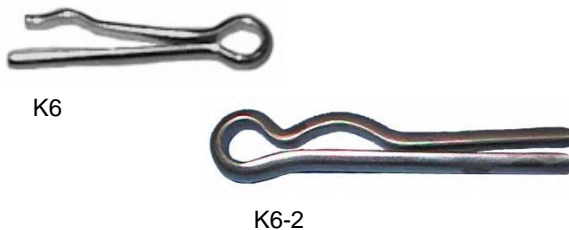
## Cotter Pin

Cat No.	Dia. Inches	Length Inches	Shipping Wt. lbs (100 Pcs)	Std. Pkg
K12-1	5/8	2 3/8	23.75	100
K12-2	5/8	13 1/2	116	100
K12-3	5/8	4 1/2	38	100
K12-4	5/8	1 13/16	20	100



- ◆ Steel
- ◆ Hot dip galvanized

## Cotter Key



Cat. No	Length Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K6	1-3/4	3	100
K6-2	2-1/4	4	100

- ◆ Stainless Steel

## Tapered Centering Washers

Cat No.	Hole Dia. In Centre Inches	To Fit Pinhole Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K1-1	9/16	1-1/2	64	100
K1-2	11/16	1-1/2	62	100
K1-3	13/16	1-1/2	60	100

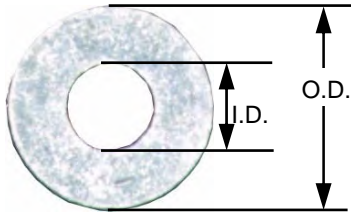


- ◆ Used on wood crossarms
- ◆ Aluminum alloy



# BOLTS, NUTS AND WASHERS

## Fill Rings (Washers)



I.D. 11/16" O.D. 1 1/2"

- ◆ \*Malleable iron or steel
- ◆ Made to Ontario spec. M246-73
- ◆ Used in assembly of steel structures as fill rings or spacers
- ◆ Hot dip galvanized

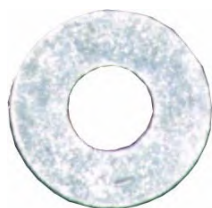
Cat No.	Thickness Inches	Shipping Wt. lbs (100 Pcs)	Std. Pkg
K1812-18*	1/8	5.5	500
K1812-316*	3/16	9	500
K1812-14*	1/4	13.5	400
K1812-516*	5/16	15.5	300
K1812-38*	3/8	18	300
K1812-716*	7/16	20.5	200
K1812-12*	1/2	23.5	200
K1812-916*	9/16	27	200
K1812-58*	5/8	31.5	200
K1812-1116*	11/16	33.5	200
K1812-34*	3/4	36	150
K1812-1316*	13/16	38	150
K1812-78*	7/8	41.5	150
K1812-1516*	15/16	45	100
K1812-1*	1	49.5	100

I.D. 13/16" O.D. 1 3/4"

Cat No.	Thickness Inches	Shipping Wt. lbs (100 Pcs)	Std. Pkg
K1834-18*	1/8	6	500
K1834-316*	3/16	10	500
K1834-14*	1/4	15	400
K1834-516*	5/16	17	300
K1834-38*	3/8	20	300
K1834-716*	7/16	23	200
K1834-12*	1/2	26	200
K1834-916*	9/16	30	200
K1834-58*	5/8	34	200
K1834-1116*	11/16	37	200
K1834-34*	3/4	40	150
K1834-1316*	13/16	43	150
K1834-78*	7/8	46	150
K1834-1516*	15/16	50	100
K1834-1*	1	55	100

# BOLTS, NUTS AND WASHERS

## Round Washers



- ◆ C.S.A. Standard
- ◆ Hot dip galvanized

Cat No.	Bolt Dia. Inches	Hole Dia. Inches	Outside Dia. Inches	Thickness Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K20-1</b>	3/8	7/16	1	5/64	2	100
<b>K20-2</b>	1/2	9/16	1 -3/8	7/64	3	100
<b>K20-3</b>	5/8	11/16	1 -3/4	9/64	8	100
<b>K20-4</b>	3/4	13/16	2	9/64	10	100
<b>K20-5</b>	7/8	1	2 -1/4	9/64	14	100
<b>K20-6</b>	1	1 -1/8	2 -1/2	9/64	17	100
<b>K20-7</b>	1 -1/4	1 -3/8	2 -3/4	11/64	19	100

## Spring Lock Washers

Cat No.	Bolt Dia. Inches	Steel Size Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K3-1</b>	3/8	.141 X .094	.7	100
<b>K3-2</b>	1/2	.171 X .125	1.5	100
<b>K3-3</b>	5/8	.203 X .156	2.5	100
<b>K3-4</b>	3/4	.234 X .188	4.3	100
<b>K3-5</b>	7/8	.266 X .219	7	100
<b>K3-6</b>	1	.297 X .250	9.5	100

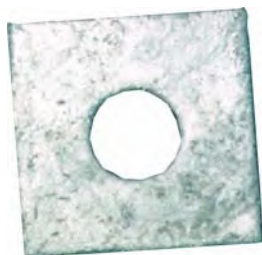


- ◆ C.S.A. Standard
- ◆ Hot dip galvanized



# BOLTS, NUTS AND WASHERS

## Square Washers



K16-2

- ◆ C.S.A. Standard
- ◆ Hot dip galvanized
- ◆ Special sizes on request

Cat No.	Size Washer Inches	Hole Dia. Inches	Bolt Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K16-1	2 x 2 x 1/8	9/16	1/2	14	200
K16-2	2 x 2 x 3/16	9/16	1/2	21	200
K16-3	2 x 2 x 1/8	11/16	1/2 or 5/8	21	200
K16-4	2 x 2 x 3/16	11/16	1/2 or 5/8	21	200
K16-5	2 x 2 x 3/16	13/16	3/4	21	200
K16-6	2 -1/4 x 2 -1/4 x 3/16	11/16	1/2 or 5/8	21	200
K16-7	2 -1/4 x 2 -1/4 x 3/16	13/16	3/4	21	100
K16-8	3 x 3 x 3/16	13/16	5/8 or 3/4	63	100
K16-9	3 x 3 x 1/4	13/16	5/8 or 3/4	63	100
K16-10	3 -1/4 x 3 -1/4 x 1/4	13/16	5/8 or 3/4	70	100
K16-11	3 -1/2 x 3 -1/2 x 3/8	13/16	5/8 or 3/4	125	100
K16-12	4 x 4 x 3/16	13/16	5/8 or 3/4	87	100
K16-13	4 x 4 x 1/4	13/16	5/8 or 3/4	120	50
K16-14	4 x 4 x 1/4	15/16	3/4 or 7/8	114	50
K16-15	4 x 4 x 3/8	15/16	5/8 or 7/8	176	50
K16-16	4 x 4 x 3/8	1 -1/16	1	178	50
K16-17	4 x 4 x 1/2	1 -1/16	1	216	50
K16-18	6 x 6 x 3/8	15/16	3/4 or 7/8	370	50
K16-19	6 x 6 x 3/8	1 -1/16	1	360	50
K16-20	6 x 6 x 1/2	1 -1/8	1	530	10

# BOLTS, NUTS AND WASHERS

## Curved Washers



K17-2

- ◆ C.S.A. Standard
- ◆ Steel
- ◆ Hot dip galvanized
- ◆ Special sizes on request

Cat No.	Size Washer Inches	Hole Dia. Inches	Bolt Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K17-0	2 x 2 x 3/16	13/16	5/8 or 3/4	22.5	200
K17-01	2 x 2 x 3/16	11/16	1/2 or 5/8	25	200
K17-1	2 -1/4 x 2 -3/16 x 3/16	11/16	5/8 or 1/4	27	200
K17-2	2 -1/4 x 2 -3/16 x 3/16	13/16	5/8 or 3/4	27	200
K17-3	3 x 2 -7/8 x 1/4	11/16	1/2 or 5/8	64	50
K17-4	3 x 2 -7/8 x 1/4	13/16	5/8 or 3/4	64	50
K17-5	3 x 2 -7/8 x 3/8	15/16	3/4 or 7/8	64	50
K17-6	3 -1/4 x 3 -1/8 x 1/4	13/16	5/8 or 3/4	150	50
K17-7	3 -1/4 x 3 -1/8 x 3/8	13/16	5/8 or 3/4	52	50
K17-8	3 -1/2 x 3 -3/8 x 3/8	13/16	5/8 or 3/4	60	50
K17-9	4 x 3 -7/8 x 3/16	13/16	5/8 or 3/4	55	50
K17-10	4 x 3 -7/8 x 1/4	13/16	5/8 or 3/4	100	50
K17-11	4 x 3 -7/8 x 1/4	15/16	3/4 or 7/8	114	50
K17-12	4 x 3 -7/8 x 3/8	15/16	3/4 or 7/8	172	50
K17-13	4 x 3 -7/8 x 3/8	1 1/8	1	172	50
K17-14	4 x 3 -7/8 x 1/2	1 1/8	1	233	50
K17-15	6 x 5 -7/8 x 3/8	1 1/8	1	150	50
K17-16	6 x 5 -7/8 x 1/2	13/16	5/8 or 3/4	528	100
K17-17	6 x 5 -7/8 x 1/2	1 1/8	1	526	100
K17-18	5 x 5 x 1/2	15/16	3/4 or 7/8	364	100
K17-19	2 x 3 -1/4 x 1/4	11/16	5/8	46	100
K17-20	4 x 3 -7/8 x 3/8	13/16	5/8	173	100
K17-21	4 x 5 x 3/8	13/16	5/8	300	100

Cat No.	For Bolt Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K2-2	1/2	9	100
K2-3	5/8	10	100
K2-4	3/4	10	100

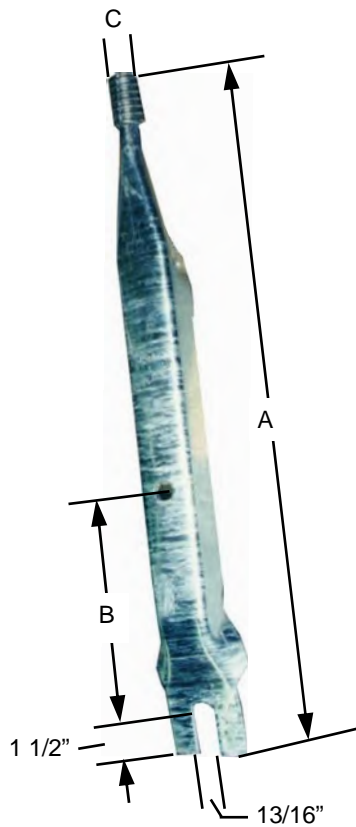
## Spur Washers

- ◆ C.S.A. Standard
- ◆ Steel
- ◆ Hot dip galvanized



# INSULATOR PINS

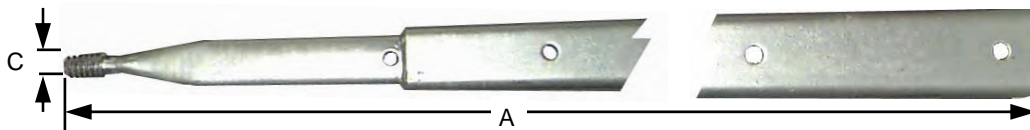
## Pole Top Pin (Pressed Steel)



Cat No.	A Inches	B Inches	C Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K201-3</b>	24	8	1-3/8	600	10
<b>K201-5</b>	18	8	1	380	10
<b>K201-6</b>	24	8	1	500	10

- ◆ C.S.A. Standard
- ◆ Provides additional clearance between primary conductor and ground
- ◆ Other sizes and drilling on request
- ◆ Hot dip galvanized

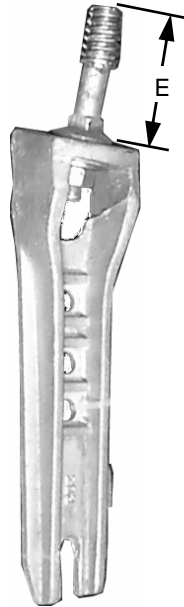
## Pole Top Extension Pin



- ◆ Made from heavy duty channel
- ◆ Extra strength for supporting conductor above wood pole top
- ◆ C.S.A. die cast lead threads (specify 1" or 1 3/8")
- ◆ Hot dip galvanized

Cat No.	A Inches	C Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K200-1</b>	36	1	1050	1
<b>K200-2</b>	44	1	1200	1
<b>K200-3</b>	48	1	1500	1
<b>K200-4</b>	36	1 3/8	1100	1
<b>K200-5</b>	44	1 3/8	1250	1
<b>K200-6</b>	48	1 3/8	1550	1

# INSULATOR PINS



## Pole Top Angle Pin

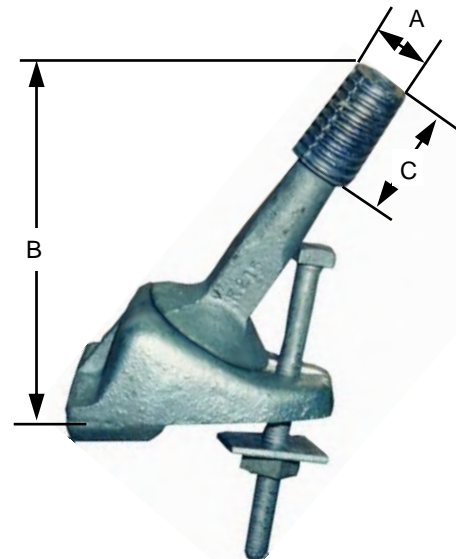
Cat No.	Width Inches	Length Inches	Lead Thread Inches	E Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K203-1	4	15-1/2	1	4	900	5
K203-2	4	15-1/2	1-3/8	7	1100	5

- ◆ Used on single and 3 phase circuits
- ◆ Heavy bracket assembly with heavy duty malleable crossarm pin .
- ◆ One 11/16" dia. hole and 11/16" x 1 3/4" slot provided for mounting
- ◆ C.S.A. die cast lead threads
- ◆ Length "E" can be supplied in any length on request
- ◆ Hot dip galvanized

## Crossarm Angle Pins

Cat No.	A Inches	B Inches	C Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K204-1	1	5	1-7/8	400	10
K204-2	1-3/8	7	2-3/8	800	5
K204-3	1	6	1-7/8	740	5
K204-4	1	7	1-7/8	780	5

- ◆ C.S.A die cast lead thread
- ◆ Heavy duty malleable cast base and pin
- ◆ Supplied complete with bolt, nut and washers
- ◆ Hot dip galvanized
- ◆ Other sizes on request



## Lead Pin Head

Thimble Adapter

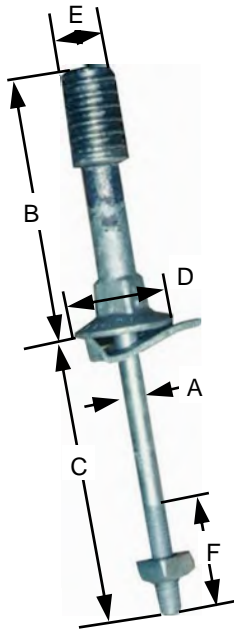
- ◆ C.S.A. standard
- ◆ Lead pin adapter saves pin replacement
- ◆ Enables use of an insulator with 1 3/8" lead thread hole, over pin insulator with 1" lead thread



Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K208	56	50

# INSULATOR PINS

## Insulator Pins ( Long Shank)



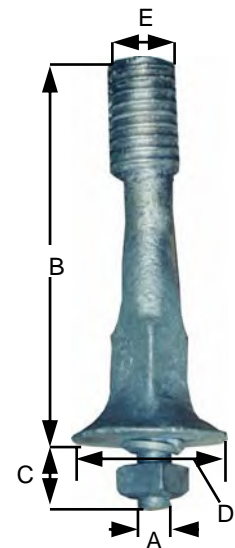
Cat No.	A Inches	B Inches	C Inches	D Inches	E Inches	F Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K206-1	1/2	3-3/4	5-1/2	1-3/4	1	2	125	25
K206-2	1/2	4-3/4	5-1/2	1-3/4	1	2	130	25
K206-6	5/8	4-3/4	5-1/2	2	1	2-1/2	165	25
K206-7	5/8	4-3/4	6-1/2	2	1	2-1/2	170	25
K206-8	5/8	6	4-3/4	2	1	2-1/2	180	25
K206-9	5/8	6	5-1/2	2	1	2-1/2	185	25
K206-10	5/8	6	6-1/2	2	1	3	195	25
K206-11	5/8	6	8	2-1/2	1	3	200	25
K206-12	5/8	6	5-1/2	2	1-3/8	3	195	25
K206 16	3/4	4-3/4	5-3/4	2	1	3	230	25
K206-17	3/4	6	5-3/4	2	1	3	250	25
K206-18	3/4	6	6-3/4	2	1	3	260	25
K206-19	3/4	6	5-3/4	2	1-3/8	3	290	25
K206-20	3/4	6	6-3/4	2	1-3/8	3	310	25
K206-21	3/4	6	7	2	1	3	265	25

- ◆ C.S.A. die cast lead thread
- ◆ Drop forged pins - equipped with square nut.
- ◆ Tapered body for maximum strength
- ◆ Hot dip galvanized

## Insulator Pins (Short Shank)

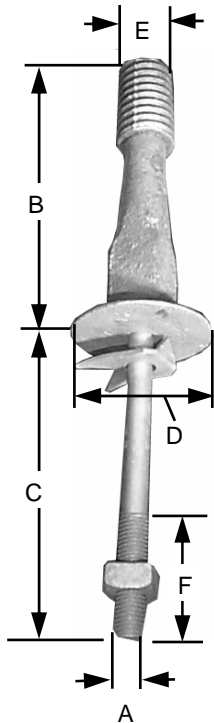
Cat No.	A Inches	B Inches	C Inches	D Inches	E Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K207-0	5/8	4-3/4	1-1/2	2-1/2	1	100	25
K207-1	5/8	5	1-1/2	2-1/2	1	120	25
K207-2	3/4	12	1-3/4	3-1/4	1-3/8	760	10
K207-3	3/4	6	1-1/2	2-1/2	1	188	25
K207-4	3/4	8	1-1/2	3-1/4	1-3/8	555	15
K207-5	3/4	13	1-3/4	3-1/4	1-3/8	800	5

- ◆ C.S.A. die cast lead thread
- ◆ Drop forged pins - equipped with split lock washer and square nut.
- ◆ Tapered body for maximum strength
- ◆ Hot dip galvanized



# INSULATOR PINS

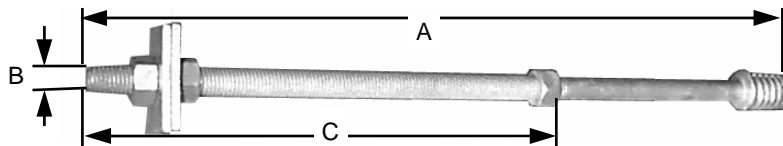
## Heavy Duty Insulator Pins



Cat No.	A Inches	B Inches	C Inches	D Inches	E Inches	F Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K215-1	5/8	7	6	3-1/4	1-3/8	2-1/4	260	25
K215-2	5/8	7	7	3-1/4	1-3/8	2-1/4	260	25
K215-3	5/8	8	6	3-1/4	1-3/8	2-1/4	450	10
K215-4	5/8	8	7	3-1/4	1-3/8	2-1/4	525	10
K215-5	3/4	8	7	3-1/4	1-3/8	3	487	10
K215-6	3/4	12	7	3-1/4	1-3/8	3	730	5
K215-7	3/4	13	7	3-1/4	1-3/8	3	790	5
K215-8	3/4	6	7	3-1/4	1-3/8	3	365	10
K215-9	3/4	7	7	3-1/4	1-3/8	3	426	10

- ◆ Heavy duty malleable with steel stud complete with spur washer and nut
- ◆ Hot dip galvanized
- ◆ C.S.A. die cast lead thread
- ◆ Other sizes and hex nuts on request

## Insulator Pins (Primary Drop Wire)



Cat No.	Thread Dia. Inches	Thread Length Inches	A Inches	B Inches	C Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K205-1	1	1-3/4	7	5/8 - 11	2-1/4	108	25
K205-2	1	1-3/4	9	5/8 - 11	2-1/4	120	25
K205-3	1	1-3/4	10	5/8 - 11	2-1/4	128	25
K205-4	1	1-3/4	12	5/8 - 11	2-1/4	144	25
K205-5	1	1-3/4	17	5/8 - 11	11	180	25
K205-6	1	1-3/4	20	5/8 - 11	11	204	25
K205-7	1	1-3/4	24	5/8 - 11	16	300	15
K205-8	1-3/8	2	12	3/4 - 10	2-1/4	252	25
K205-9	1-3/8	2	24	3/4 - 10	2-1/4	253	15

- ◆ Round steel bar supplied with two nuts
- ◆ Washers not included
- ◆ C.S.A. die cast lead thread
- ◆ Hot dip galvanized
- ◆ Other sizes on request



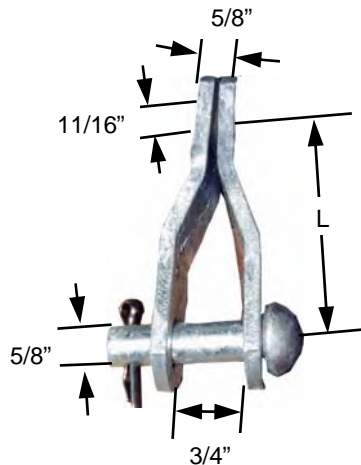
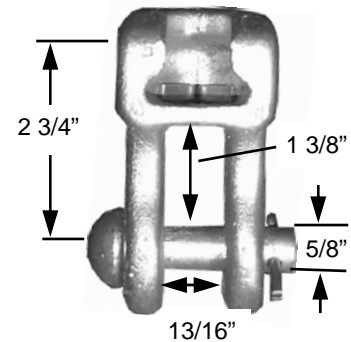
# INSULATOR HARDWARE

## Tower and Suspension Fittings

### Socket Clevis Adapter

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K186	200	25

- ◆ For use with ball socket insulators and clevis type fittings



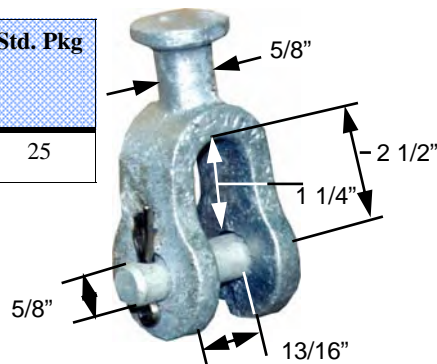
### Clevis Adapter

- ◆ For ANSI class 52-2 Class insulators - ANSI spec. C29-2

Cat No.	L Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K191-1	3	100	25
K191-2	10	260	20
K191-3	12	320	10
K191-4	14	380	10

### Ball Clevis

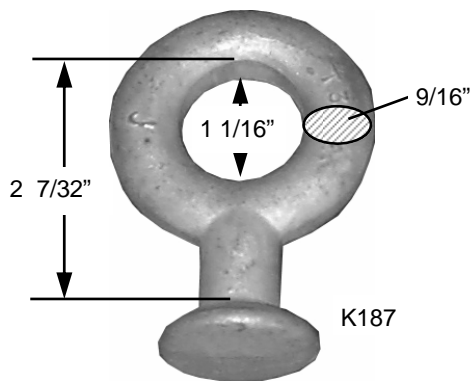
Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K185*	96	25



- ◆ \*Drop forged or ductile casting
- ◆ Nominal strength 25,000 lbs
- ◆ Hot dip galvanized
- ◆ Used for attaching suspension insulators to towers in place of nooks and eyes
- ◆ ANSI Class 52-2 class insulators - ANSI Spec. C29-2

# INSULATOR HARDWARE

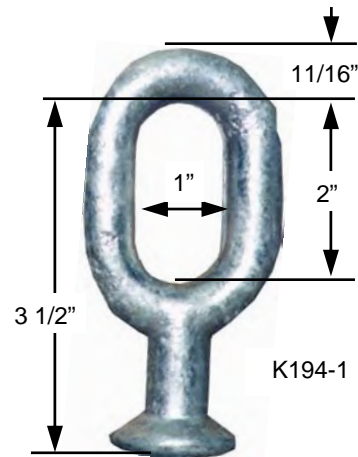
## Ball Eye Round



Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K187*</b>	100	25

- ◆ \*Drop forged or ductile casting
- ◆ Nominal strength 25,000 lbs
- ◆ Hot dip galvanized

## Ball Eye Oval



Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K194-1*</b>	90	50

## Ball Socket Tongue

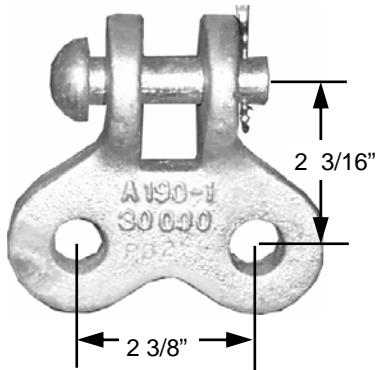


- ◆ Hot dip galvanized
- ◆ Nominal strength 25,000 lbs

Cat No.	L Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K184-1</b>	5/8	140	25
<b>K184-2</b>	3/4	148	25
<b>K184-3</b>	13/16	152	25

# INSULATOR HARDWARE

## Double Eye Clevis



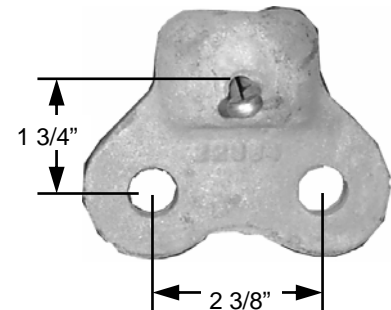
- ◆ \*Ductile or malleable casting
- ◆ Can be supplied with bolt
- ◆ Ultimate strength 25,000 lbs
- ◆ Hot dip galvanized

Cat No.	Hole Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K190*</b>	11/16	200	25

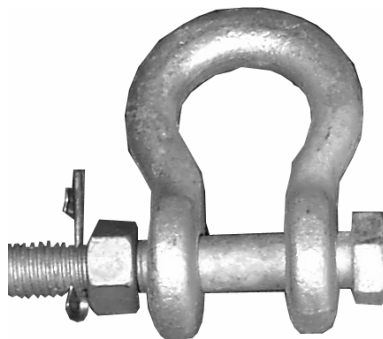
## Double Eye Socket

Cat No.	Hole Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K189*</b>	11/16	260	25

- ◆ \*Ductile or malleable casting
- ◆ Ultimate strength 25,000 lbs
- ◆ Hot dip galvanized



## Anchor Shackle



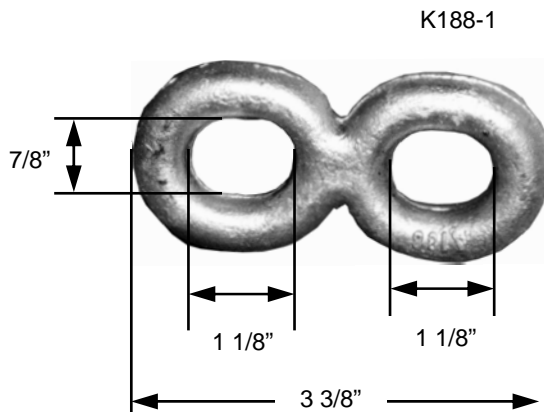
- ◆ Ultimate load: as forged - 30,000 lbs 135 kN.min.  
\*heat treated - 60,000 lbs 266 kN min.
- ◆ \*Add suffix "LT" for Heat Treated
- ◆ Hot dip galvanized

Cat No.	Bolt Type	Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K196-1</b>	Clevis Pin	5/8	152	25
<b>K196-1B</b>	Hex Head	5/8	152	25
<b>K196-2</b>	Clevis Pin	3/4	152	25
<b>K196-2B</b>	Hex Head	3/4	152	25

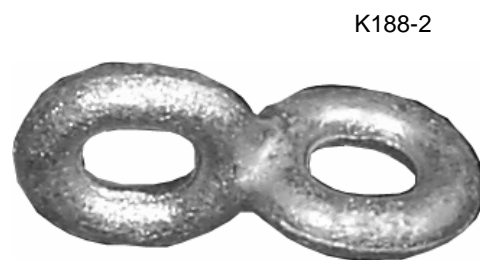
# INSULATOR HARDWARE

## Figure - 8 Double Links

### Plain



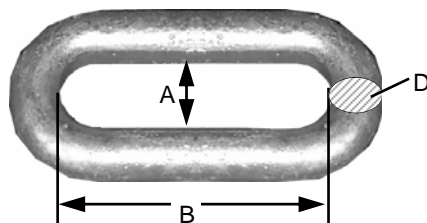
### 90° Twisted



Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K188-1	76	50
K188-2	76	50

- ◆ Drop forged steel
- ◆ Nominal strength - 18,000 lbs.
- ◆ Heat treated strength - 25,000 lbs
- ◆ Hot dip galvanized

### Strain Link



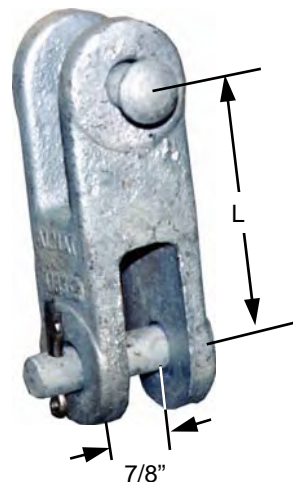
- ◆ Drop forged
- ◆ Heat treated
- ◆ Hot dip galvanized

Cat No.	Yield lbs	Ultimate Strength lbs	A Inches ± 1/8	B Inches ± 1/8	D Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K182-34	40000	60000	1-1/8	3-5/8	3/4	144	25



# INSULATOR HARDWARE

## 90 ° Double Clevis

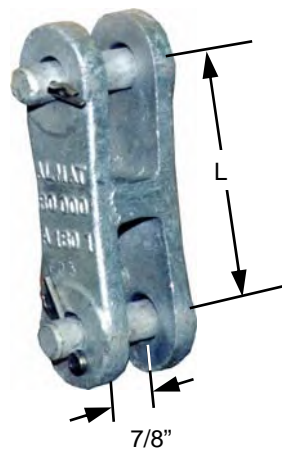


Cat No.	L Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K183-2*	3-5/8	240	20

- ◆ Double clevises are ductile castings
- ◆ \*Add suffix "B" to Cat No. for machine bolt, nut and cotter key
- ◆ All ferrous parts hot dip galvanized
- ◆ Ultimate strength 30,000 lbs

## Straight Double Clevis

Cat No.	L Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K180-1*	4	300	20



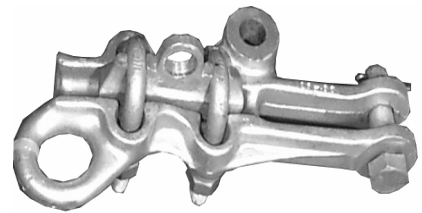
- ◆ Double clevises are ductile castings
- ◆ \*Add "B" to Cat No. for machine bolt, nut and cotter key.
- ◆ All ferrous parts hot dip galvanized
- ◆ Ultimate strength 30,000 lbs



# INSULATOR HARDWARE

## Straight Line Clamp

Cat No.	Range		Shipping Wt. lbs (100 pcs)	Std. Pkg
	Minimum	Maximum		
K240-1*	.25	.60	185	10
K240-1D*	.25	.60	190	10
K240-2*	.50	.93	260	10
K240-2D*	.50	.93	265	10



K-240-1D

- ◆ High strength aluminum body
- ◆ Captured steel U bolts, steel cotter bolts, S.S. cotter key
- ◆ Wave seat
- ◆ Pulling and lifting eye
- ◆ Provision for jumper stud
- ◆ \*Add "D" for drilled for stud

## Jumper Studs



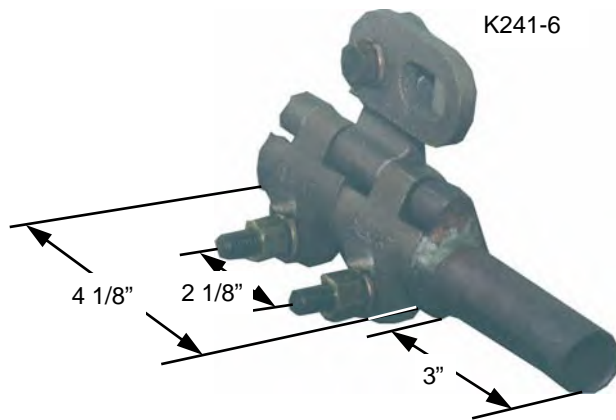
- ◆ Kabar connector consists of straight line dead end clamp incorporating machined double tapered hole which can accommodate a straight jumper stud
- ◆ Clamps available in heat-treated aluminum alloy only
- ◆ Straight jumper studs are made from electrolytic copper bar with the tapered end tinned providing good conductivity between the clamp and stud
- ◆ Jumper Holding Stud - steel, hot dip galvanized

Cat. No	Description	Shipping Wt. lbs (100 pcs)	Std. Pkg
K241-1	Jumper Holding Stud	125	25
K241-2	Straight Jumper Stud	100	25
K241-3	120° Jumper Stud	105	25
K241-4	100° Jumper Stud	125	25

# INSULATOR HARDWARE

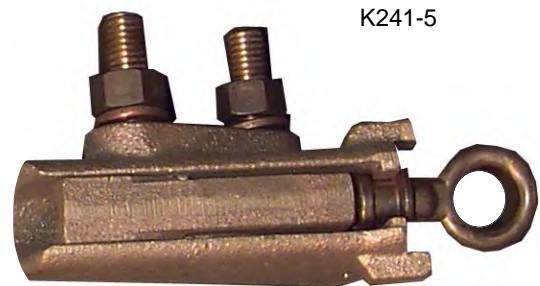
## Live Line Pigtail Connectors

- ◆ For single connection designed to be compressed on a conductor and clamped to a stud of a live line connection
- ◆ Commonly used to isolate overhead equipment within a distribution system or change out



Cat No.	MCM	Strands	Shipping Wt. lbs (100 pcs)	Std. Pkg
K241-6	350	61	253	15
K241-62	500	61	290	15

Cat No.	MCM	Strands	Shipping Wt. lbs (100 pcs)	Std. Pkg
K241-5	350	61	280	15



Cat No.	MCM	Strands	Shipping Wt. lbs (100 pcs)	Std. Pkg
K241-7	350	61	250	10
K241-72	500	61	250	10

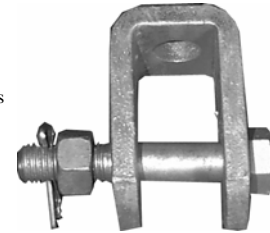
- ◆ Copper compression terminal , 2 hole NEMA pad for extra flex conductor

# INSULATOR HARDWARE

## Bolt Head Clevis

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K36-1	188	25

- ◆ Used for deadending on crossarms and poles
- ◆ Formed steel
- ◆ Hot dip galvanized



## Dead End Clevis

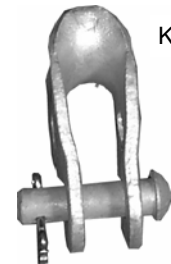
- ◆ C.S.A. standard
- ◆ Formed from 1/4" x 1 1/2" high grade steel bar
- ◆ Used to dead end insulator assemblies
- ◆ Hot dip galvanized

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K36-2	152	50

## Thimble Clevises

Cat No.	Cotter Bolt Dia. Inches	Thimble Dia. Inches	Max. Strand Dia. Inches	Rating lbs	Shipping Wt. lbs (100 pcs)	Std. Pkg
K271**	5/8	1-3/4	7/8	22,500	179	25
K270-1*	5/8	2-3/4	1-3/8	10,000	152	25
K270-2*	5/8	2-3/4	7/8	22,500	300	25

- ◆ For dead ending wire or strand to suspension insulators
- ◆ Smooth groove eliminates chafing of soft strand
- ◆ Large thimble diameter to maintain strand shape
- ◆ Takes hook for stringing and tensioning
- ◆ \*\*K271 - malleable casting steel bolt, steel cotter key
- ◆ \*K270 - formed steel
- ◆ Ferrous parts hot dip galvanized



K270



K271

## Sky Hook (Pulling Hook)



Cat No.	Rating lbs	Shipping Wt. lbs (100 pcs)	Std. Pkg
K270-10	6000	120	25

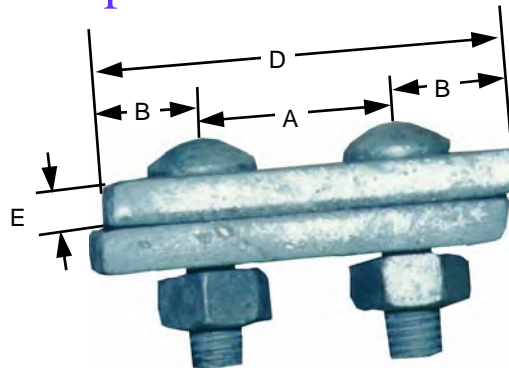
- ◆ For connecting preform deadend clamp to a line puller to sag the conductor prior to installation of the preform grip
- ◆ Heat treated steel
- ◆ Hot dip galvanized



# INSULATOR HARDWARE

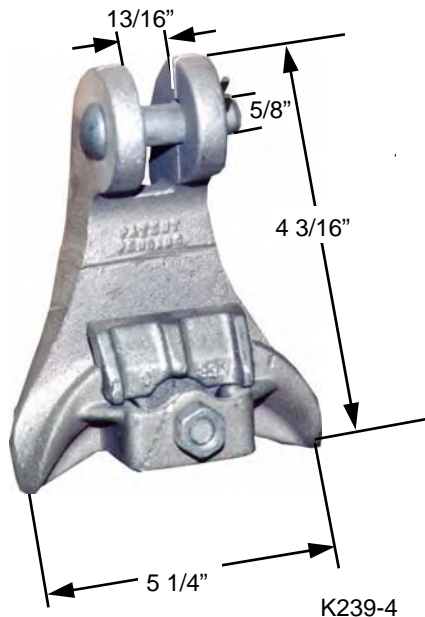
## Clevis Strain Adapter Plates

- ◆ Made from high grade steel bar heat treated
- ◆ Bolts are of high grade steel
- ◆ Hot dip galvanized



Cat No.	A Inches	B Inches	Hole Dia. Inches	D Inches	E Inches	Plate Width Inches	Ultimate Strength (Single Plate)	Yield Strength (Single Plate)	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K176-1</b>	2-3/16	31/32	13/16	4-3/4	3/8	1-3/4	27000 lbs	19000 lbs	280	15
<b>K176-2</b>	5-1/4	2-7/16	1-5/16	10-1/8	3/4	4	83000 lbs	55000 lbs	500	10

## Single Bolt Angle Clamp



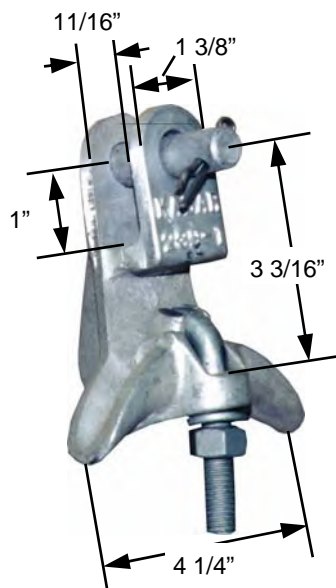
Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K239-4</b>	250	10

- ◆ High strength aluminum alloy
- ◆ Cable size .300" to 1.125" diameter
- ◆ Ultimate tensile strength 12,500 lbs
- ◆ Cable clamping force 700 lbs -inches
- ◆ High strength bolt with permanently attached nut for high torque.
- ◆ Can be used with hot stick
- ◆ Recommended for use with ACSR and all aluminum conductors

# INSULATOR HARDWARE

## Angle Clamp Twisted

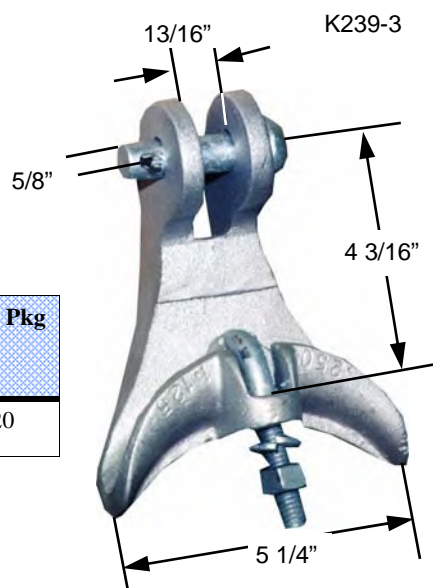
- ◆ High strength aluminum alloy
- ◆ Cable size .200" to .700" diameter
- ◆ Ultimate tensile strength 7,000 lbs
- ◆ Angle clamps attached to the eye of suspension insulator for use on rural lines or with eyebolt to carry neutral wires
- ◆ Adaptable for use at angle from 30° to 120°



Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K239-2	128	25

## Angle Clamp Straight

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K239-3	250	20



- ◆ High strength aluminum alloy
- ◆ Cable size .250" to 1.125" diameter
- ◆ Ultimate tensile strength 12,000 lbs
- ◆ Angle clamps attached to the eye of suspension insulator for use on rural lines or with eyebolt to carry neutral wires
- ◆ Adaptable for use at angle from 30° to 120°

# INSULATOR HARDWARE

## Secondary Clevises Spool Insulator Clevises (ANSI Class 53-2)



K35-1

- ◆ Clevises made from 1/4" x 2" flat steel bar, supplied with 5/8" cotter pins and cotter keys
- ◆ Mounting holes are 11/16"
- ◆ Spool insulators to be ordered separately.
- ◆ All ferrous parts are hot dip galvanized

Type N

Base to centre of insulator 4"



K35-2

Type M

Base to centre of insulator 4" & 8"

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K35-1	220	25
K35-2	458.5	12
K35-6	160	20
K35-10*	140	25



K35-6

Base to centre of insulator 3 3/8"

- ◆ Clevises formed channel supplied with 5/8" cotter pin and cotter key
- ◆ Mounting holes are 11/16"
- ◆ All ferrous parts are hot dip galvanized
- ◆ Spool insulators to be ordered separately



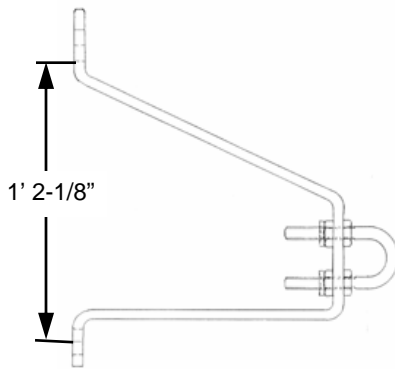
K35-10

Base to centre of insulator 2 1/4"

- ◆ Flat steel 3/16" x 1 1/2" galvanized
- ◆ Supplied with cotter pin and cotter key
- ◆ \*Complete with spool insulator
- ◆ Other sizes on request

# INSULATOR HARDWARE

## Corner Construction Brackets



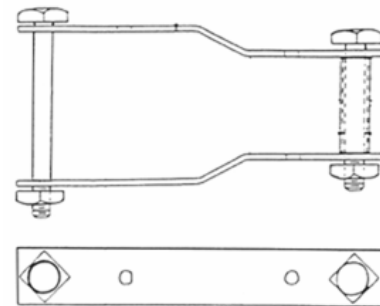
Cat No.	Size Inches	Type	Extension Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K79-10</b>	3/8 x 2	Rigid	10	700	1
<b>K79-15</b>	1/2 x 2	Rigid	15	1400	1

- ◆ Used with suspension insulators to give clearance at angle position
- ◆ U-Bolt supplied
- ◆ Other sizes on request
- ◆ Steel, hot dip galvanized

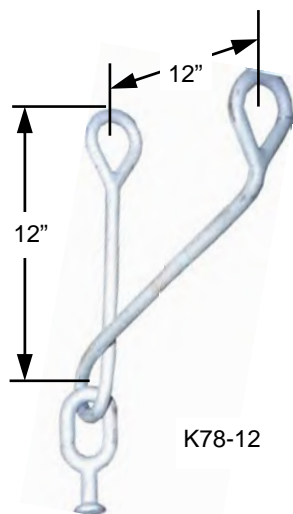
## Wood Crossarms Bracket

Cat No.	Shipping Wt. lbs	Std. Pkg
<b>K35-4</b>	100	10

- ◆ Used on wood crossarms for deadending secondary circuits
- ◆ Hex head bolts and nuts available if necessary
- ◆ Hot dip galvanized
- ◆ Other sizes on request



## Swing Type Bracket

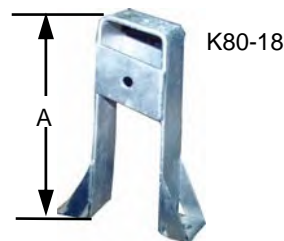


Cat No.	Clearance Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K78-10</b>	10	700	5
<b>K78-11</b>	11	650	5
<b>K78-12</b>	12	1400	5
<b>K78-13</b>	13	1350	5

- ◆ Gives clearance at angle on corner construction
- ◆ K78-11 and K78-13 are without Ball Link
- ◆ Steel, hot dip galvanized

# LINE POST HARDWARE

## Stand Off Bracket (Post Type Insulator)



Cat No.	A Inches	Slot Size Inches	Hole Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K80-1</b>	3	13/16 x 1-1/4	13/16	650	10
<b>K80-2</b>	9	13/16 x 1-1/4	13/16	1100	1
<b>K80-5</b>	9	13/16 x 1-1/4	13/16	1300	1
<b>K80-18</b>	18	13/16 x 1-1/4	13/16	2100	1

- ◆ Heavy duty bracket for line post insulator mounting
- ◆ Can also be used with steel pin with pin type insulator
- ◆ K80-5 and K80-18 have side plates for mounting insulator pins and insulators for 90° take off
- ◆ Hot dip galvanized

## Pole Top Bracket

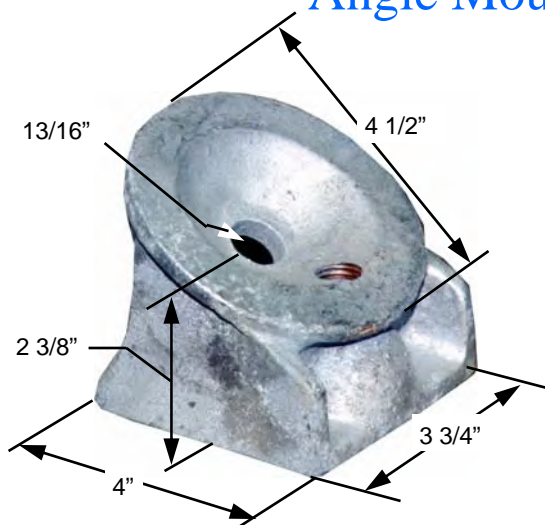


Cat No.	Pole Mtg. Dia. Inches	Bolt Centers Inches	Stud Dia. Inches	Straight or Angle	Duty	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K81-1</b>	5/8	8	3/4	Straight	Heavy	1200	5
<b>K81-3</b>	5/8	8	3/4	Specify	Medium	800	5
<b>K81-4</b>	5/8	8	3/4	Angle	Heavy	1000	5

- ◆ For use with Line Post Insulators
- ◆ Lower attachment hole is slotted to compensate for any drilling errors in pole
- ◆ Damaged insulator can be replaced without removing bracket
- ◆ Hot dip galvanized

# LINE POST HARDWARE

## Angle Mounting Fittings



Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K88-2</b>	500	10

- ◆ 3/4" tapped hole
- ◆ Reduce stress on crossarm and on insulator
- ◆ Permits the use of one Line Post for turning corners or other angle construction
- ◆ Made from malleable iron
- ◆ Hot dip galvanized

## Line Post Insulator Conductor Clamps



K58-4



K58-2



K58-3

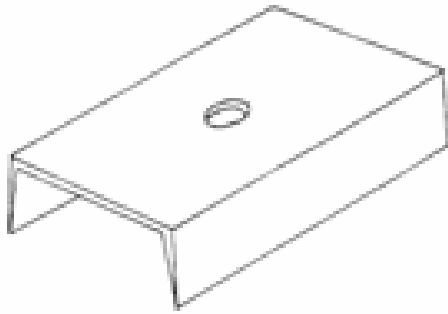
Cat No.	Conductor Range Inches	No. of Bolts	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K58-1</b>	.220 to .635	2	140	25
<b>K58-2</b>	.5 to 1.06	2	135	20
<b>K58-3</b>	.300 to .875	1	100	15
<b>K58-4</b>	.375 to 1.125	1	167	15

- ◆ Body and keeper are made from high aluminum alloy
- ◆ Bolts of high tensile steel
- ◆ Design for use with horizontal or vertical post insulators
- ◆ Keepers are reversible to fit different size of conductor
- ◆ All clamps supplied with anti-static stainless steel spring
- ◆ K58-3 is single bolt - can be used with hot line sticks



# LINE POST HARDWARE

## Line Post Insulator Saddle

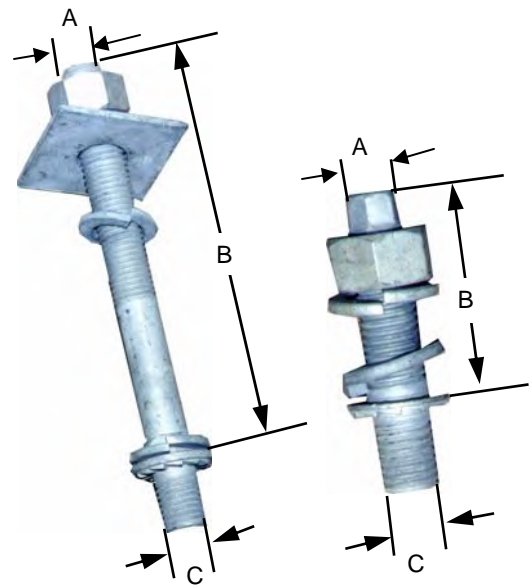


- ◆ For heavy duty or extra factors of safety
- ◆ Used to prevent splitting of arms
- ◆ Steel construction
- ◆ Hot dip galvanized

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K86</b>	350	10

## Insulator Studs (for Line Post Insulators)

Cat No.	A Inches	B Inches	C Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K59-1</b>	3/4	2-1/8	3/4	76	50
<b>K59-2</b>	3/4	6-7/8	3/4	176	25
<b>K59-3</b>	5/8	6-7/8	3/4	100	25
<b>K59-4</b>	3/4	2-1/8	7/8	90	50
<b>K59-5</b>	3/4	7-1/2	7/8	200	25
<b>K59-6</b>	7/8	3-1/2	7/8	75	100
<b>K59-7</b>	7/8	8	7/8	266	15

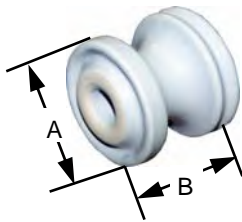


- ◆ Made from high strength forging steel
- ◆ All studs made with hexagon to fit 11/16" wrench
- ◆ Studs also available with end hexagon for 9/16" socket wrench
- ◆ Ultimate strength in tension 21,000 lbs. min.
- ◆ Hot dip galvanized



# PORCELAIN INSULATORS

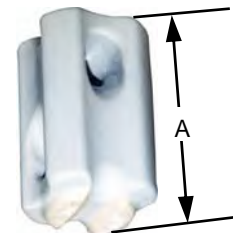
## Spool Insulators



Cat No.	A Inches	B Inches	ANSI Class	Transverse Strength lbs	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K2030</b>	2-1/4	2-1/8	53-1	2000	47	60
<b>K2031</b>	3-1/8	3	53-2	3000	120	40
<b>K2030B</b>	2 1/4	2 1/4	53-1	2050	44	60

## Guy Strain Insulators

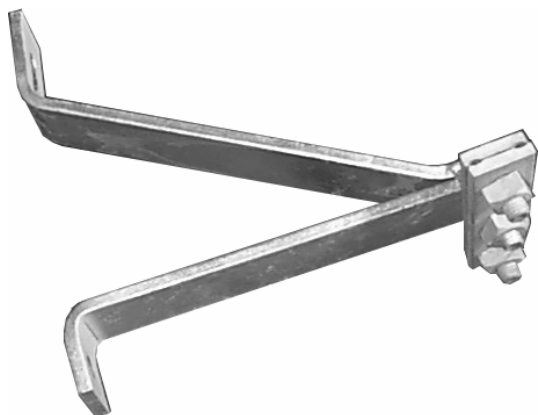
Cat No.	A Inches	ANSI Class	Tensile Strength lbs	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K2023</b>	3-1/2	54-1	10000	200	24
<b>K2025</b>	4-1/4	54-2	12000	200	24
<b>K2033</b>	5-1/2	54-3	20000	265	20
<b>K2029</b>	6-1/2	54-4	20000	445	9





# CABLE MATERIAL

## Offset Pole Bracket

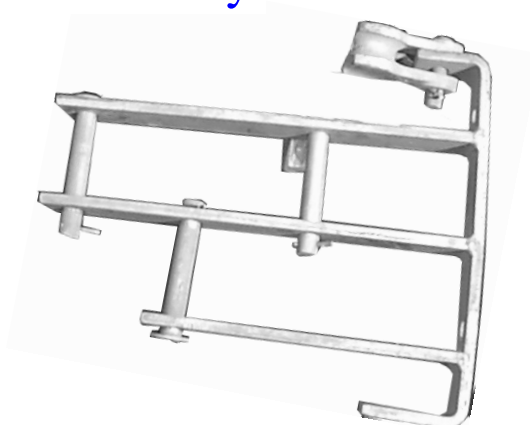


- ◆ Provides 12" spacing from pole
- ◆ 3 bolt guy clamps included can be installed on 5 KV or 15 KV systems
- ◆ Steel, hot dip galvanized

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K466	655	1

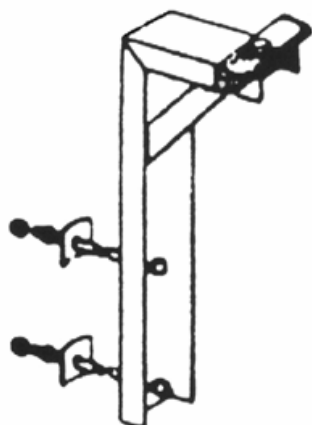
## Corner Bracket Assembly

- ◆ Configuration maintained at corners allows for conductor phase identification
- ◆ Mounting bolts and spool insulators ordered separately
- ◆ Steel, hot dip galvanized



Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K465	1700	1

## Pole Top Extension

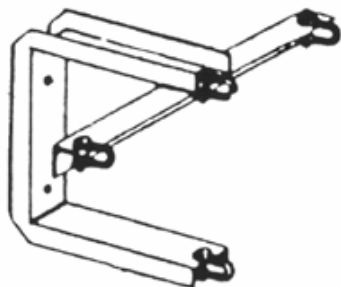


- ◆ Gives adequate pole space on existing poles
- ◆ Allows extended tangent construction
- ◆ 3 bolt guy clamp included
- ◆ Mounting bolts ordered separately
- ◆ Steel, hot dip galvanized

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K468	1100	5

# CABLE MATERIAL

## Dead End Bracket



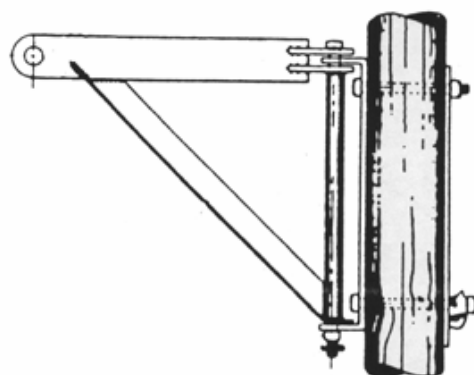
Cat No.	Shipping Wt. lbs (each)	Std. Pkg
K467	24	1

- ◆ Maintains neat configuration
- ◆ For any type of pole
- ◆ Mounting bolts ordered separately
- ◆ Steel, hot dip galvanized

## Swinging Angle Bracket

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K469	1600	1

- ◆ Mounted to swing free with line
- ◆ Supplied with back plate for added support
- ◆ Guying attachment also supplied
- ◆ Mounting bolts not included
- ◆ Steel, hot dip galvanized



## Corner Attachment

- ◆ 35° to 60° angles... all messengers
- ◆ Fastened to pole with one through bolt
- ◆ Use with any messenger or guy grip
- ◆ In most cases, either span or down guy can be attached with same bolt
- ◆ Thimble design will accept all types of messenger dead ending devices for both inside and outside angles from 35° to 60°
- ◆ Sufficient clearance from pole, even on maximum outside angle, is assured
- ◆ Pole contacting surface is curved for stability



Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K294	212	25

# CABLE MATERIAL

## Universal Clamps



Cat No.	Nut Type	Strand Size Range Inches	Conductor Size Stranded Range Inches	U Bolt Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K44-1</b>	Hex	3/16 to 3/8	No. 6 - 2/0	3/8	61	25
<b>K44-2</b>	Hex	1/2 to 9/16	No. 1 - 4/0	1/2	133	25

- ◆ Can be used on regular guy strand as well as relative soft types for both guying and dead ending applications
- ◆ Each size clamp accomodates a wide range of strand diameters
- ◆ Separating block & keeper - malleable iron
- ◆ U bolts & nuts - steel
- ◆ All parts hot dip galvanized

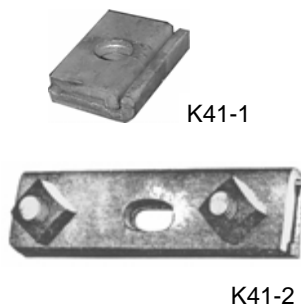
## Curved Suspension Clamps

- ◆ For supporting messenger strand at angles in the line
- ◆ Curved ends prevent damage to strand wires
- ◆ Rounded strand grooves
- ◆ Steel, hot dip galvanized



Cat No.	Type	Mtg. Hole Dia. Inches	Overall Length Inches	Strand Size Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K42-1</b>	3 Bolt Light	11/16	7	1/4 to 7/16	290	25

## Suspension Clamps



Cat No.	Type	Overall Length Inches	Mtg. Hole Dia. Inches	Strand Size Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K41-1</b>	1 Hole	2-3/8	11/16	1/4 to 7/16	76	25
<b>K41-2</b>	3 Hole	5-3/4	11/16	1/4 to 7/16	224	25

- ◆ One hole type for light cables & on cable arms
- ◆ Three hole for heavy cable & long spans
- ◆ Two 1/2" high strength bolts are assembled on 3 hole clamp
- ◆ Rounded strand grooves
- ◆ Steel, hot dip galvanized

# CABLE MATERIAL

## Neutral Wire Brackets



Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K91-1*	150	50
K91-2*	40	50

- ◆ Used to support neutral conductor when using overhead lines
- ◆ Spurs prevent bracket turning on pole
- ◆ High strength aluminum
- ◆ \*Can also be supplied in malleable; use Cat No. K91-2

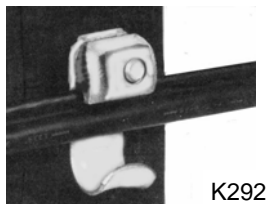
## Cable Lashing Clamps

Cat No.	Shipping Wt. lbs	Std. Pkg	Std. Ctn
K90-1	16	100	300



- ◆ For securing lashing wire at end of span
- ◆ Bolt end is peened over to prevent nuts running off
- ◆ Can be securely attached to messenger before taking up tension on cable lashing wire

## Suspension Clamp, Cable Hanger



**K292**

- ◆ Curved Groove - Tangent construction or angles to 35°
- ◆ For solid wire messenger .109" to .134" bare or covered
- ◆ Accommodates 5/8" Dia. pole mounting bolt



**K296**

- ◆ Curved Groove - Tangent construction or angles to 10°
- ◆ Clamp gripping length - 3 1/4"
- ◆ Will support cable through 200 pair, No 19

Cat No.	Shipping Wt. lbs (100 Pcs)	Std. Pkg
K292	57	25
K296	147	25

# CABLE MATERIAL

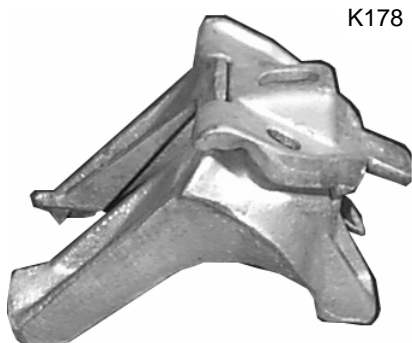
## Aerial Cable Clamp



K193-1

- ◆ Ductile iron casting
- ◆ Curved clamping groove for sag of span
- ◆ Teeth on feet resist bending
- ◆ Hot dip galvanized
- ◆ \* Heavy Duty

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K193-1</b>	200	25
<b>K333</b>	200	15
<b>K178*</b>	750	6

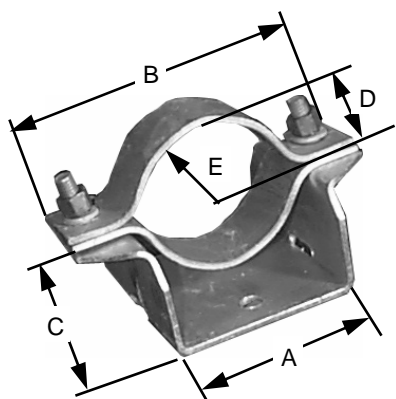


K178



K333

## X, Y & Z Clamps

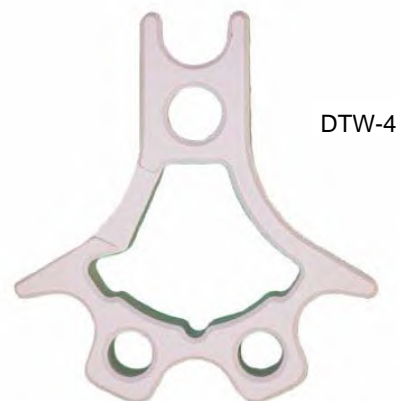


- ◆ All parts hot dip galvanized

Cat No.	Type	A Inches	B Inches	C Inches	D Inches	E Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K490-1</b>	X	2-1/8	4-3/8	1-1/4	11/16	3/4	150	20
<b>K490-2</b>	Y	2-7/8	5-1/4	1-5/8	1	1-1/8	200	10
<b>K490-3</b>	Z	3-3/4	6	2-1/8	1-7/16	1-9/16	200	10

# CABLE MATERIAL

## Diamonite Secondary Cable Spreaders



- ◆ Provides dependable separation for tapping either triplex, reverse lay or parallel lay secondary.
- ◆ High Alumina Ceramic material which is non tracking and weathering with dielectric and mechanical strengths.
- ◆ Appearance - Because of the high strength of Diamonite material, a minimum cross-section is required. With less mass required and being off white in colour, the noticeability of our spacer is reduced to a minimum.
- ◆ Provision for tying conductor with tie wire.
- ◆ Cat. DTW-3 offers the most economical spreader where only three wire secondary is encountered.
- ◆ Cat. DTW-4 accommodates either three or four wire secondary. It also provides considerably larger cable seat area, both in width and conductor diameters.

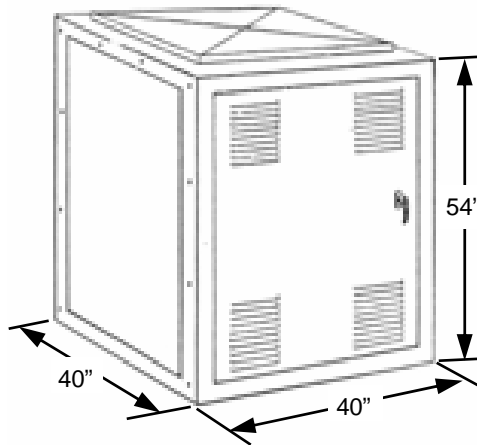
## # 4 Tie Wire

Cat No.	Shipping Wt. lbs	Std. Pkg
# 4 Tie Wire	60	425 Meters



# CABINETS

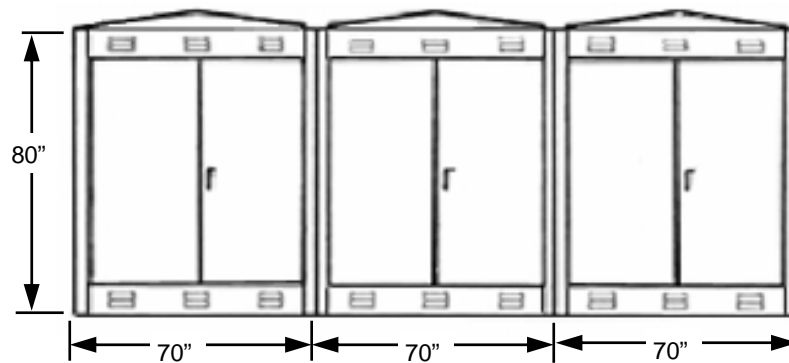
## Single Transformer Cabinets



- ◆ Can be used singly or in multiples to house transformers on concrete or metal pads
- ◆ Side covers can be removed for making connections, if required
- ◆ Top cover is easily removed to isolate defective transformer
- ◆ Two hinged doors with provision for Hydro padlock on each door
- ◆ Protected vents and screens

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K520-1-40	300	1

## Triple Transformer Cabinets

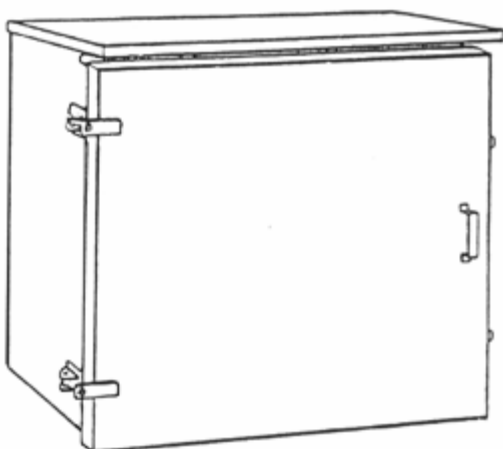


- ◆ No panels between compartments
- ◆ Copper grounding bar 1/4" x 1" attached to base at front and back of each module and jumpered between sections
- ◆ Bars are drilled and tapped, supplied c/w 3/8" x 1 1/2" silicon bronze bolts and lock washers
- ◆ 3 sections shipped separately and bolted together in the field
- ◆ Each door has a handle and clasp for padlocks
- ◆ Each section is supplied with 8 offset hold down brackets with 13/16" holes
- ◆ Painted green (other colours on request)

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K520-3-70	1300	1

# CABINETS

## Auxiliary Meter Box



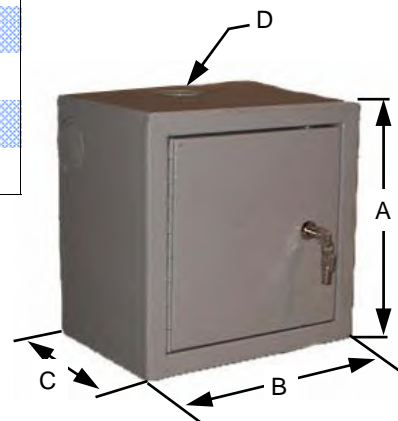
- ◆ Standard size 30" x 30" x 12"
- ◆ For indoor or outdoor applications
- ◆ Made to Ontario Hydro Spec. M-361 & M-440
- ◆ Finish - painted
- ◆ Other sizes available to meet any requirement

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
K440	60	1

## Cable T.V. Cabinets

Cat No.	A Inches	B Inches	C Inches	D Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K400-14	14	14	6	1 (2)	20	1
K400-20	20	20	8	2 (2)	30	1
K400-24	24	18	8	2 (3)	40	1
K400-30	30	20	8	3 (3)	50	1
K400-33	30	30	10	3 (3)	60	1

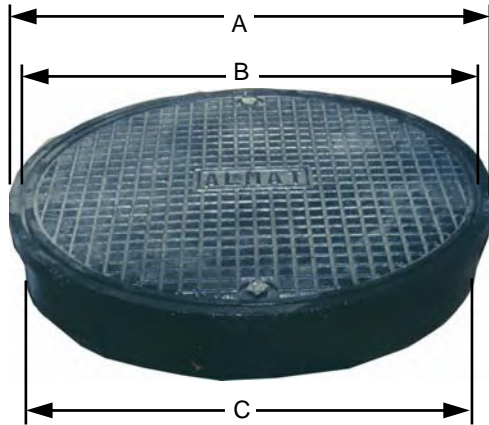
- ◆ Made from heavy guage steel
- ◆ Equipped with special lock to prevent easy burglary





# MISCELLANEOUS

## Junction Box-Frame and Cover ( Hand Hole )



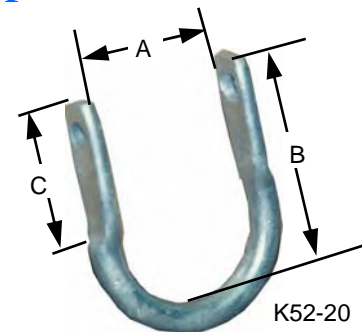
K650-12

Cat. No.	A Inches	B Inches	C Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K650-12	14	12-3/4	13-3/4	2500	1
K650-18	20	18-3/4	18	4800	1

- ◆ Grey iron casting - black tar paint finished
- ◆ Cover retained by 1/2" by 1" hex head cap screw flush with top of cover
- ◆ Lifting pocket is provided for easy removal of cover
- ◆ 3 equidistant holes are provided in the side of the frame for anchoring

## Padlock Bail - Hasp

Cat No.	A Inches	B Inches	C Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
K52-20	1-3/4	2-3/4	1-1/2	68	50
K52-21	1-3/4	3-5/8	1-3/4	80	25



K52-20

- ◆ K52-20 and K52-21 are used where two different locks are required to allow joint access to a sub-station

## Padlock



### Features

- ◆ Heel & Toe locking Shackle
- ◆ Mushroom Pins
- ◆ Brass pins, bolts and plugs
- ◆ Key removable in locked or unlocked position
- ◆ Pick resistant key way



# MISCELLANEOUS

## Kabar Underground Multiplex Junction Unit



### Advantages...

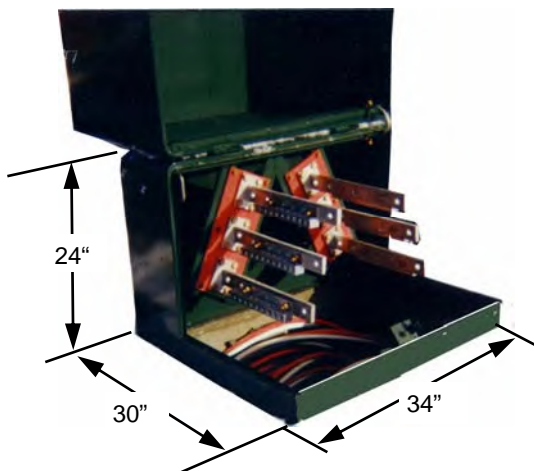
- ◆ Creates savings by having shorter conductor runs
- ◆ Eliminates hazardous water problems
- ◆ Straight “pull away” when removing load break elbows from modules
- ◆ All connections are made above ground
- ◆ Easier to isolate faults on a system
- ◆ **Other configurations upon request**

Cat No.	Power Range	Length Inches	Width Inches	Height Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K500-3</b>	15KV - 200A - 1Ph. - 3 Ways	44	21-1/2	24	18000	1
<b>K500-4</b>	15KV - 200A - 1Ph. - 4 Ways	44	21-1/2	24	18000	1
<b>K501-333</b>	15KV - 200A - 3Ph. - 3 Ways	54	27	24	20000	1
<b>K501-444</b>	15KV - 200A - 3Ph. - 4 Ways	54	27	24	20000	1
<b>K502-3</b>	27KV - 200A - 1Ph. - 3 Ways	44	30	30	20000	1
<b>K502-4</b>	27KV - 200A - 1Ph. - 4 Ways	44	30	30	20000	1
<b>K503-333</b>	27KV - 200A - 3Ph. - 3 Ways	74	60	30	40000	1
<b>K503-444</b>	27KV - 200A - 3Ph. - 4 Ways	74	60	30	40000	1
<b>K502-3-35</b>	35KV - 200A - 1Ph. - 3 Ways	44	30	30	20000	1
<b>K502-4 -35</b>	35KV - 200A - 1Ph. - 4 Ways	44	30	30	20000	1
<b>K503-333-35</b>	35KV - 200A - 3Ph. - 3 Ways	74	60	30	40000	1
<b>K503-444-35</b>	35KV - 200A - 3Ph. - 4 Ways	74	60	30	40000	1



# MISCELLANEOUS

## Above Ground Secondary Junction Box



Cat. No	Output	Shipping Wt. lbs each	Std. Pkg
K507- * -1	single connection	200	1
K507- * -2	dual connection	200	1

- \* -8 to 32 Unit Output to be specified upon ordering
- Standard Feature -100- 200 Amp Service
- 220 V Delta, 2 Phase to ground connection

### \* Example

K507-20-2 = 20 Output from 2 Input Sources  
ie. - 2 Separate Transformer feeds

### Considerations

- ◆ **Transformer Congestion**  
-Maximum Number of Services in each Transformer is 8 (locally)
- ◆ **Transformers Required = 4**  
-To achieve 32 Unit Output
- ◆ **Cost of Transformers**
- ◆ **No Available Real Estate**  
-Limited Room Available for Transformer  
-Blast Walls  
-Sewers and Watermains

### Concerns

- ◆ **Supply Cable**  
-Suggest 500kcmil Alum  
-Parallel Duct for Replacement  
-Cold Load Start-up
- ◆ **Grounding Requirements**  
-1 Ground Rod

# MISCELLANEOUS



## Flagram

- ◆ Used as warning to motorists that workmen are in the area and also as grounding device to protect hydro crews working on overhead lines
- ◆ Three coloured flags can be used during daylight or amber solar switch flashing during darkness
- ◆ Ideal for rural areas
- ◆ Steel cast hammer drives flagram easily into road verge
- ◆ Reusable for many years
- ◆ Easily carried & stored on Hydro and telephone line trucks
- ◆ Made to Ontario Hydro Spec. M278

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K600</b>	25	1

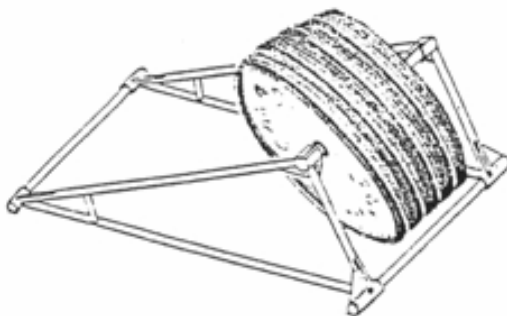
## Underground Cable Marker

Cat No.	Type	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K602</b>	Steel Pipe	1500	1
<b>K602-2</b>	Angle	1500	1

- ◆ Made from steel pipe or angle
- ◆ Hot dip galvanized
- ◆ Installed over underground high voltage cable to prevent digging or driving stakes
- ◆ K602 made to Ontario Hydro Spec. M343



## Cable Reel Stand

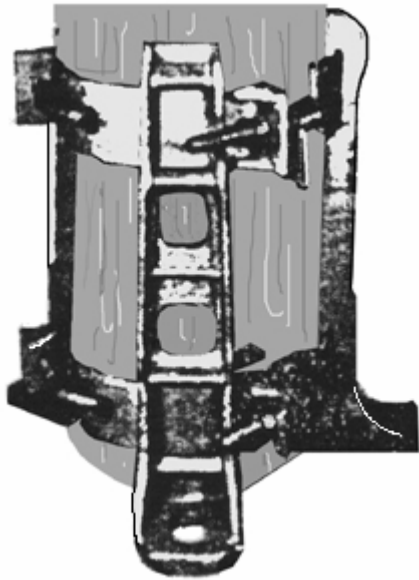


- ◆ Easily assembled and dismantled on site to give minimum storage requirements
- ◆ Accommodates wire reels with overall width of 40", 52" and up to 54" in diameter
- ◆ Made to Ontario Hydro dwg. X4337-R10

Cat No.	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K610-1</b>	400	1

# MISCELLANEOUS

## Pole Mount (Adjustable)



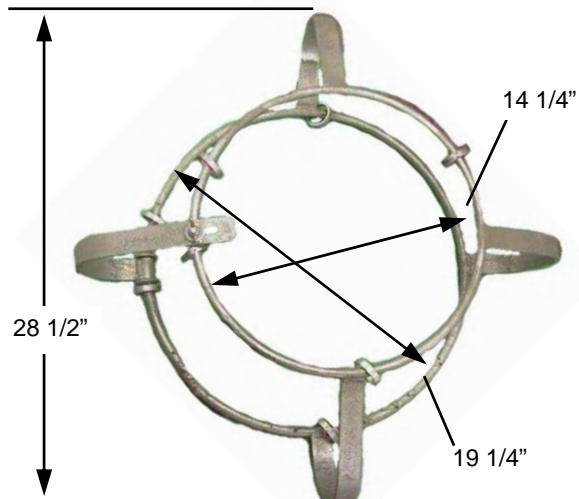
Cat No.	Accessories	Pole Butt Dia. Inches	Shipping Wt. lbs (100 pcs)	Std. Pkg
<b>K916</b>	3 Legs casting	8 thru 11	17500	1
	6 Adjustable "J" bolts 6 Clamping bands 3 Sets of anchors	11 thru 15		

- ◆ Templates and base specification supplied on request
- ◆ Special arrangement available for pole diameter 15" to 20" (and over) and 6" to 8"

## Jenny Reel

Cat No.	Shipping Wt. lbs (each)	Std. Pkg
<b>K44</b>	10.5	1

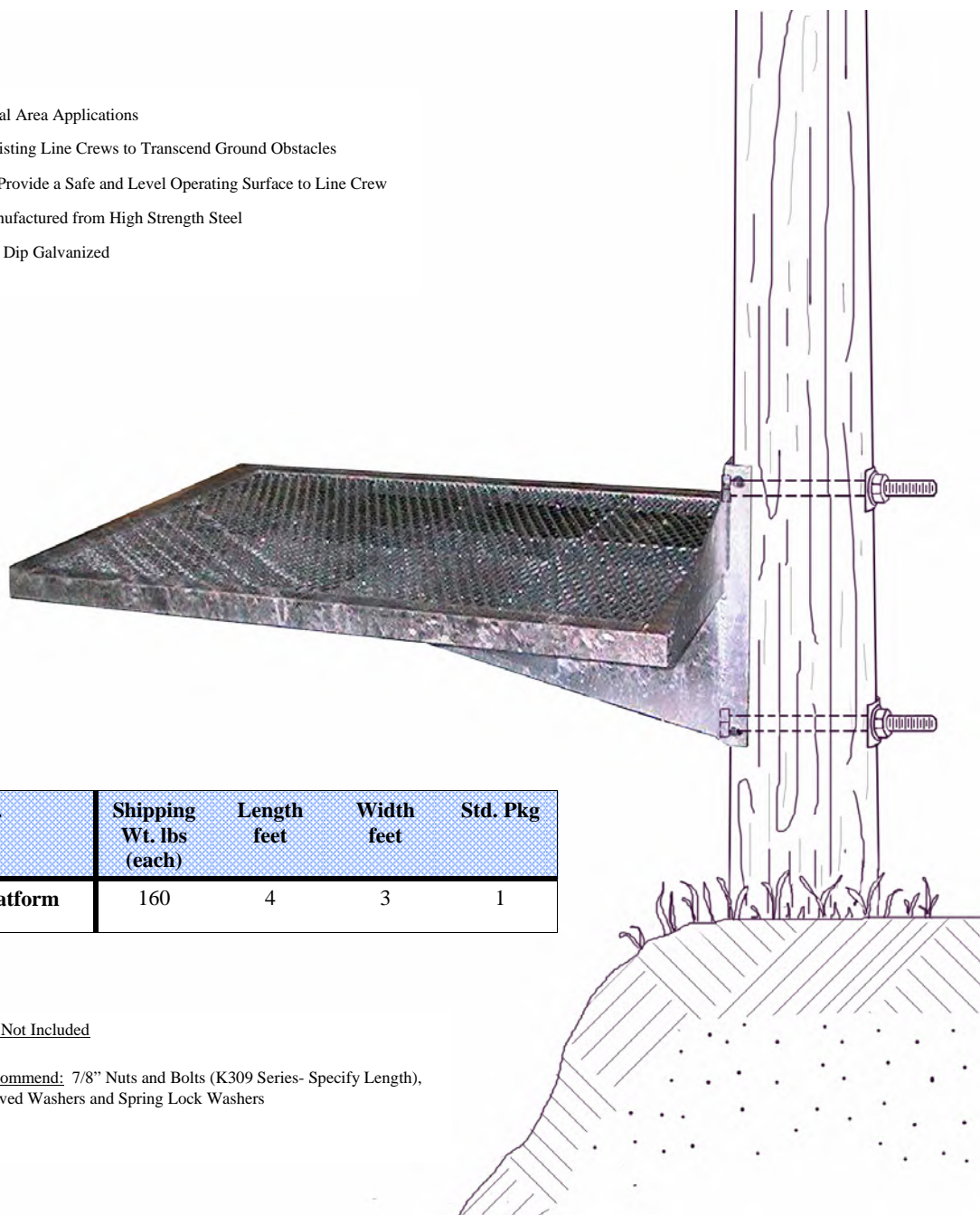
- ◆ Made from round and flat bar
- ◆ Hot dip galvanized
- ◆ Used for holding guy wire coil



# MISCELLANEOUS

## Pole Platform

- ◆ Rural Area Applications
- ◆ Assisting Line Crews to Transcend Ground Obstacles
- ◆ To Provide a Safe and Level Operating Surface to Line Crew
- ◆ Manufactured from High Strength Steel
- ◆ Hot Dip Galvanized



Cat No.	Shipping Wt. lbs (each)	Length feet	Width feet	Std. Pkg
<b>Pole Platform</b>	160	4	3	1

Hardware Not Included

- ◆ Recommend: 7/8" Nuts and Bolts (K309 Series- Specify Length), Curved Washers and Spring Lock Washers

# TOOLS



## Band-it Band

Cat No.	UIC No.	Width Inches	Thickness Inches	Shipping Wt. lbs (100 feet)	Std. Pkg
<b>C201</b>	13201	3/16	.015	1.2	1
<b>C202</b>	13202	1/4	.020	1.7	1
<b>C203</b>	13203	3/8	.025	3.2	1
<b>C204</b>	13204	1/2	.030	5.1	1
<b>C205</b>	13205	5/8	.030	6.4	1
<b>C206</b>	13206	3/4	.030	7.7	1

- ◆ Band-it Band in Type 201 stainless steel has been the industry standard for nearly 60 years with its superior yield and tensile strength properties for maximum clamping strength
- ◆ All sizes feature fully rounded smooth edges for safety and easy installation

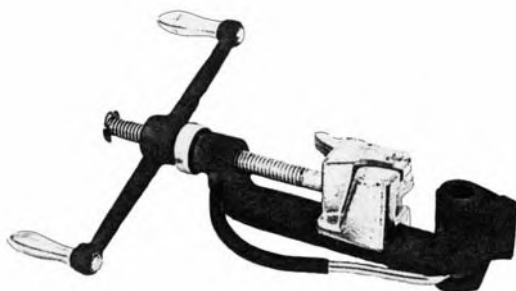
## Band-it Buckle

Cat No.	UIC No.	Width Inches	Shipping Wt. lbs (100 Pcs)	Std. Pkg
<b>C251</b>	13251	3/16	.16	100
<b>C252</b>	13252	1/4	.3	100
<b>C253</b>	13253	3/8	.8	100
<b>C254</b>	13254	1/2	2.1	100
<b>C255</b>	13255	5/8	2.4	100
<b>C256</b>	13256	3/4	3.7	100



- ◆ Ear-Lokt Buckles in Type 201 stainless steel are designed to accommodate both single and double wrap clamps.
- ◆ Unique teeth and ears provide for maximum clamping strength

## Band-it Tool



Cat No.	UIC No.	Shipping Wt. lbs (each)	Std. Pkg
<b>C001</b>	13001	4.4	1

- ◆ Drop forged with tensioning capability of over 2,400 lbs. and built-in cutter
- ◆ Spring loaded gripper lever, Friction held cutoff lever with plastic grip, Blue, epoxy powder coated finish, Spin handle retaining ring



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