KORTICK

Pole Line Hardware Construction Specialists We take pleasure in introducing Kortick Catalog 216 of our pole line hardware and construction specialty products. Kortick is the solutions provider for hardware needs.

As the pioneer pole line hardware manufacturer on the pacific coast, we have served the industry since 1898, building our business and our reputation for service and quality. To our customers we express appreciation for making our growth and development possible-both in the past and in the years ahead. We pride ourselves on the quality of our products, manufactured domestically, with a century of experience behind their production. When you buy Kortick, you can rest assured that you are buying a quality product.

Kortick aspires to be a company in which all of its employees and its surrounding community can take pride. Our mission is to maintain the most accessible knowledge in the hardware industry and the best delivery times, while continuing to offer excellent service and affordable prices. We aim to do this while bringing manufacturing jobs back to America and making positive changes to our environment.

At Kortick Manufacturing we value: Growing domestic manufacturing and employment Environmental stewardship and social responsibility Good business practices

We guarantee: Cost competitive product The best and most accessible knowledge in the industry Fast delivery Quality product

Thank you for your continued support,

Hain France

Gavin Frase President

Kortick Manufacturing gfrase@kortick.com



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Kortick is proud to offer Armorgalv® AG3000 thermal diffusion galvanizing (TDG). TDG is a process that diffuses our proprietary zinc solution onto steel to form a durable iron zinc alloy, not just a superficial coating. This is why Armorgalv® TDG has superior corrosion performance than standard hot dip galvanizing, as tested in the dead sea on navy chain (shown below). Kortick has invested substantial time into testing our TDG coated products with our in-house salt spray test chamber to optimize our TDG coating to get the best corrosion resistance. The process combines superior protection with an environmentally friendly process . Armorgalv® TDG adheres to ASTM A1059 & AG3000. TDG won the 2006 EPA award for "most valuable pollution prevention." (MVP2).

To order parts with a Armorgalv® TDG finish: Add "TDG" to the end of the part number. For example KXXXXTDG.



Shown above are the results of a test of HDG (left) versus TDG (right).

Design Engineering and Custom Manufacturing. We say "Yes"

An Excerpt from Kortick's History:

During the early 1900's necessity was the mother of invention. A 'Consultant Engineer' was not listed in the phone book and design-engineering staffs were still unknown. When the Power Company, Utility Company, or Telephone Company had a construction 'problem' they had to tackle it fast. Many times Mr. Kortick sat down with the utility construction men, hashed over their problems, and then burned the midnight oil until a solution was found and production could start. Many pole line hardware items used on the coast today were 'born' in the Kortick plant in just that way. Many items were recently redesigned or otherwise improved to meet current load conditions or to adapt them to our more modern and economical standard. While others copy, Kortick invents.

Today, Kortick holds true to this philosophy. We take pride in our Catalog and "Standards" but also keep a staff of engineers with extensive experience in the T&D field to assist customers in specialized design needs. If you do not see exactly what you are looking for in the catalog, please call our Sales Staff. Kortick's production capabilities allow for flexibility in both production run size and product design. Catalog 216 incorporates many of the new designs Kortick made in collaboration with utility engineers in the last five years.





Bolt Strength Chart

Bolt Diameter (in)	Single Shear Through Threads	Single Shear Through Shaft	Tensile Strength
3/8			4250
1/2	5200	7950	7800
5/8	8330	12420	12400
3/4	12440	17890	18350
7/8	17270	24350	25400
1	22690	31800	33500
1 1/4	36590	49700	53300

Specification Reference Notes

ASTM A123 - This specification covers the standard requirements for hot dip galvanizing.

ASTM A153 - This specification covers the standards for zing coatings applied through hot-dip process on iron and steel hardware.

ASTM A1059 & AG3000- This specification covers the general requirements for protective zinc coatings applied through the thermal-diffusion coating method. <u>Specify Armorgalve® AG3000 with ASTM 1059</u>.

ASTM A36 - This specification covers carbon structural steel shapes, plates, and bars.

ASTM A307 - This specification covers the chemical and mechanical requirements for the three grades (A, B, & C) of carbon steel bolts and studs in specific sizes.

ASTM A325 - This specification covers the chemical, mechanical, and dimensional requirements for the two types of heavy hex structural bolts.

ASTM F1470 - This specification covers sampling protocol.

IEEE C135.1 - This standard covers the requirements for inch-based carriage bolts, machine bolts, double-arming bolts, and double-end bolts and nuts, commonly used in overhead line construction.

IEEE C135.9 - This standard covers the requirements of inch-based wood pole line hardware commonly used in overhead line construction.

CSA C83-96 - This Canadian standard covers the general requirements for hardware used in the construction of communication lines and power lines including distribution and transmission lines.

General Order 95 (CA) - The purpose of these rules is to formulate, for the State of California, requirements for overhead line design, construction, and maintenance.

RUS - Rural Utilities Service specifications for line construction.

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Applicability of Terms and Conditions: These Terms and Conditions will govern all sales by Kortick Manufacturing (herein called "Seller"), unless otherwise agreed to in writing by an employee of Seller. Terms and Conditions that are different from or in addition to these Terms and Conditions are objected to and will not be binding on Seller.

Drawings and Catalog Representations: All drawings subject to change without notification. Drawings are catalog representations not to be used for engineering purposes.

Quotations, Orders, and Prices: All prices and specifications contained on Seller's quotation are subject to change without notice unless indicated otherwise on the quotation. All quotations on items are made subject to prior sale on such goods. The minimum billing charge on any order placed with Seller shall be \$100.00. All rush shipments will incur a \$25.00 charge for expedited processing.

Shipment, Freight, and Delivery: All prices are F.O.B. Kortick Manufacturing, Hayward, California, with freight prepaid and added to invoice, or freight collect. If freight charges are to be prepaid and added, Seller shall use the carrier it deems the most economical and efficient method of shipment unless otherwise specified by Buyer. Seller's placement of purchased goods at the point of shipment in the possession of a trucking company or other carrier, or on the Buyer's vehicle shall constitute delivery to Buyer, and thereafter Buyer shall bear all expense and risk of loss.

Terms: Net thirty (30) days from the date of Seller's invoice. A service charge of one and one half percent (1-1/2%) may be added to past due invoices, but only to the extent provided by law.

Deviations in manufactured quantities: Kortick may request qty variations of +-10% on production runs.

Acceptance: Buyer shall notify Seller of any defect, error, or shortage of any items received by Buyer within 14 days after delivery. Buyer shall provide purchase order number and any other documents that substantiate the alleged defect, error, or shortage. If Buyer fails to provide such notice and documents within the required time, Buyer will be deemed to have waived such error, shortage, or defect.

Tolerances and Variations: Except in the particulars specified by Buyers and agreed to in writing by Seller, the goods being sold to Buyer will be produced in accordance with Seller's standard practices. All goods, however, including those produced to meet an exact specification, will be subject to tolerance and variations consistent with good manufacturing practices in regard to dimension, weight, section, composition, mechanical and electrical properties; to normal variations in surface and internal conditions and in quality; and in deviations from tolerances and variations consistent with practical testing and inspection methods.

Warranty and Disclaimers of Warranty: Seller warrants to Buyer that the goods supplied hereunder will be free from defects in material and workmanship under normal and proper usage for a period of one year from the date of shipment by Seller. Seller makes no warranties with respect to any goods subjected to abuse, misuse, misapplication, neglect, alteration or accident; to improper and incorrect installation or maintenance; or to abnormal conditions of use.

Returns: No goods may be returned without first having secured prior written authorization from Seller, in the form of a Return Materials Authorization. Only standard, non-obsolete, non-special order items in original cartons and in resalable condition may be returned, freight prepaid. Return items are subject to a minimum restocking fee of 25% of original purchase price. Such return requests must be initiated within 30 days of shipment.



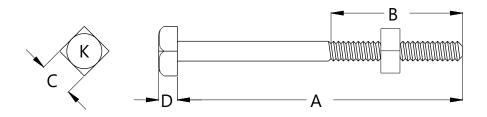
SQUARE HEAD MACHINE BOLTS

POLE LINE HARDWARE - FASTENERS

Features

Each bolt is assembled with one square nut. Bolts are roll threaded to a course class 2 fit and are formed with a chamfered tip for ease of use. The head is stamped with the letter K. They are available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000. All bolts meet ASTM 307 and IEEE C135.1 standards.

Kortick's square head machine bolts are used by the construction, maintenance, and service devisions of every utility in the country, They are also known as through bolts or cable suspension bolts.



Bolt Diameter (in)	Head Flat (C)	Head Height (D)	Thread	Tensile Strength
3/8	9/16	1/4	3/8 - 16 UNC	4250
1/2	3/4	21/64	1/2 - 13 UNC	7800
5/8	15/16	27/64	5/8 - 11 UNC	12400
3/4	1-1/8	1/2	3/4 - 9 UNC	18350
7/8	1-5/16	19/32	7/8 - 9 UNC	25400
1	1-1/2	21/32	1 - 8 UNC	33500
1 1/4	1-7/8	27/32	1-1/8 - 7 UNC	53300

Part Number	Diameter	Length (A)	Thread (B)	Part Number	Diameter	Length (A)	Thread (B)
K1002	3/8	2	1	K1101	1/2	1	3/4
K1004-1/2	3/8	4-1/2	3	K1101-1/2	1/2	1-1/2	1
K1005	3/8	5	3	K1102	1/2	2	1-1/4
K1005-1/2	3/8	5-1/2	3	K1102-1/4	1/2	2-1/4	1-1/4
K1006	3/8	6	3	K1103	1/2	3	1.25

3

3

3/8 9 3 K1105 1/2 5 3

K1104

K1104-1/2

1/2" Machine Bolts

3

4

4-1/2

1/2

1/2

To request Armorgalv® finish add "TDG" to the end of part number



K1007

K1008

K1009

3/8" Machine Bolts

3/8

3/8

7

8

SQUARE HEAD MACHINE BOLTS

POLE LINE HARDWARE - FASTENERS

K1224

5/8

24

Part Number	Diameter	Length (A)	Thread (B)	Part Number	Diameter	Length (A)	Thread (B)
K1106	1/2	6	3	K1226	5/8	26	6
K1107	1/2	7	3	K1228	5/8	28	6
K1108	1/2	8	4	K1230	5/8	30	6
K1109	1/2	9	4	K1230-32	5/8	32	6
K1110	1/2	10	4	K1230-34	5/8	34	6
K1112	1/2	12	6	K1230-36	5/8	36	6
K1114	1/2	14	6	K1230-38	5/8	38	6
K1116	1/2	16	6				
K1118	1/2	18	6		3/4" Macl	nine Bolts	
K1120	1/2	20	6	Part Number	Diameter	Length (A)	Thread (B)
K1122	1/2	22	6	K13O2	3/4	2	1-3/8
K1122-24	1/2	24	6	K13O2-1/2	3/4	2-1/2	1-1/2
	E (0") 4			K13O3	3/4	3	1-3/4
	5/8" Macl		-1 (-)	K1308-1/2	3/4	8-1/2	4
Part Number	Diameter	Length (A)	Thread (B)	K1310	3/4	10	4
K12O1-3/4	5/8	1-3/4	1-1/4	K1312	3/4	12	6
K12O2	5/8	2	1-1/4	K1314	3/4	14	6
K12O2-1/2	5/8	2-1/2	1-1/2	K1316	3/4	16	6
K12O3	5/8	3	1-1/2	K1318	3/4	18	6
K1204	5/8	4	1-1/2	K1320	3/4	20	6
K12O5	5/8	5	3	K1322	3/4	22	6
K1206	5/8	6	3	K1324	3/4	24	6
K1207	5/8	7	3	K1326	3/4	26	6
K1208	5/8	8	4	K1328	3/4	28	6
K12O9	5/8	9	4	K1330	3/4	30	6
K1210	5/8	10	6	K1332	3/4	32	6
K1212	5/8	12	6	K1338	3/4	38	6
K1214	5/8	14	6	K1342	3/4	42	6
K1216	5/8	16	6				
K1218	5/8	18	6				
K1220	5/8	20	6				
K1222	5/8	22	6				
144004							

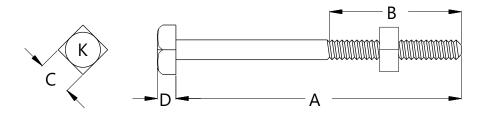
MANUFACTURING COMPANY POLE LINE HARDWARE DROP PRESS-UPSET FORGINGS

6.

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POLE LINE HARDWARE - FASTENERS



7/8" Machine Bolts

Part Number	Diameter	Length (A)	Thread (B)
K1762	7/8	12	6
K1764	7/8	14	6
K1766	7/8	16	6
K1768	7/8"	18"	6
K1770	7/8	20	6
K1772	7/8	22	6
K1774	7/8	24	6
K1776	7/8	26	6
K1778	7/8	28	6
K1780	7/8	30	6
K1780-42	7/8	42	6

1" Machine Bolts

Part Number	Diameter	Length (A)	Thread (B)
K2160	1	10	4
K2162	1	12	6
K2164	1	14	6
K2166	1	16	6
K2168	1	18	6
K2170	1	20	6
K2172	1	22	6
K2174	1	24	6

Custom Options

Custom diameters (up to 2-1/2"), thread lengths, and assemblies available on request.

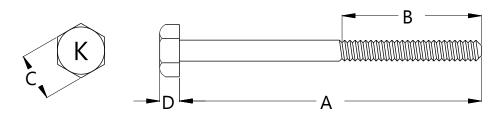


HEX HEAD BOLTS

POLE LINE HARDWARE - FASTENERS

Features

Bolts are course threaded to a class 2 fit and are formed with a chamfered tip for ease of use. The head is stamped with the letter K. They are available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000 and AG3000. All bolts meet ANSI C135 standard. Hex nuts and washers should be ordered separately.



Bolt Diameter (in)	Head Flat (C)	Head Height (D)	Thread	Tensile Strength
3/8	9/16	1/4	3/8 - 16 UNC	4250
1/2	3/4	11/32	1/2 - 13 UNC	7800
5/8	15/16	27/64	5/8 - 11 UNC	12400
3/4	1-1/8	1/2	3/4 - 9 UNC	18350
7/8	1-5/16	37/64	7/8 - 9 UNC	25400
1	1-1/2	43/64	1 - 8 UNC	33500
1 1/4	1-7/8	27/32	1-1/8 - 7 UNC	53300

3/8" Hex Bolts

3/8" Hex Bolts				
Part Number	Length (A)			
K1000-3/4H	3/4			
K1001H	1			
K1001-1/4H	1-1/4			
K1001-3/4H	1-3/4			
K1002H	2			
K1002-1/2H	2-1/2			
K1003H	3			
K1003-1/2H	3-1/2			
K1004H	4			
K1004-1/2H	4-1/2			
K1005H	5"			
K1005-1/2H	5-1/2			
K1006H	6"			
K1006-1/2H	6-1/2"			

Part Number	Length (A)
K1007H	7"
K1007-1/2H	7-1/2"
K1008H	8"
K1008-1/2H	8-1/2"
K1009H	9"
K1009-1/2H	9-1/2"
K1010H	10"
K1010-1/2H	10-1/2"
K1011H	11"
K1012H	12"
K1012-13H	13"
K1012-14H	14"
K1012-15H	15"
K1012-16H	16"

3"
gth (A)
/4"
1/4"
1/2"
2"
1/4"
1/2"
3"
1/2"
4"

3/8" Hex Bolts

Part Number Length (A)

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HEX HEAD BOLTS

POLE LINE HARDWARE - FASTENERS

5/16" Hex Bolts					
Part Number	Length (A)				
K1016-1/2H	4-1/2"				
K1017H	5"				
K1017-1/2H	5-1/2"				
K1018H	6"				
K1018-1/2H	6-1/2"				
K1019H	8"				
K1019-1/2H	8-1/2"				
K1020H	9"				
K1020-10H	10"				
K1020-10-1/2H	10-1/2"				
K1020-11H	11"				
K1020-12H	12"				

1/2" Hex Bolts

Part Number	Length (A)		
K1100H	3/4"		
K1101H	1"		
K1101-1/4H	1-1/4"		
K1101-1/2H	1-1/2"		
K1102H	2"		
K1102-1/4H	2-1/4"		
K1101-3/4H	1-3/4"		
K1102-1/2H	2-1/2"		
K1102-3/4H	2-3/4"		
K1103H	3"		
K1103-1/4H	3-1/4"		
K1103-1/2H	3-1/2"		
K1103-3/4H	3-3/4"		
K1104H	4"		
K1104-1/2H	4-1/2"		
K1105H	5"		
K1105-1/2H	5-1/2"		

1/2" Hex Bolts			
Part Number	Length (A)		
K1106H	6"		
K1106-1/2H	6-1/2"		
K1107H	7"		
K1107-1/2H	7-1/2"		
K1108H	8"		
K1108-1/2H	8-1/2"		
K1109H	9"		
K1109-1/2H	9-1/2"		
K1110H	10"		
K1110-1/2H	10-1/2"		
K1111H	11"		
K1111-1/2H	11-1/2"		
K1112H	12"		
K1113H	13"		
K1114H	14"		
K1115H	15"		
K1118H	18"		
F (0" L	D 1:		

5/8" Hex Bolts

5/8 Hex Bolts				
Part Number	Length (A)			
K1201H	1"			
K12O1-1/4H	1-1/4"			
K1201-1/2H	1-1/2"			
K1201-3/4H	1-3/4"			
K12O2H	2"			
K12O2-1/4H	2-1/4"			
K12O2-1/2H	2-1/2"			
K12O3H	3"			
K12O3-1/4H	3-1/4"			
K12O3-1/2H	3-1/2"			
K12O4H	4"			
K12O4-1/2H	4-1/2"			

5/8" Hex Bolts

Part Number	Length (A)		
K12O5H	5"		
K12O5-1/2H	5-1/2"		
K1206H	6"		
K12O6-1/2H	6-1/2"		
K1207H	7"		
K1207-1/2H	7-1/2"		
K1208H	8"		
K1208-1/2H	8-1/2"		
K1209H	9"		
K1209-1/2H	9-1/2"		
K1210H	10"		
K1210-1/2H	10-1/2"		
K1211H	11"		
K1211-1/2H	11-1/2"		
K1212H	12"		
K1213H	13"		
K1214H	14"		
K1215H	15"		
K1216H	16"		
K1217H	17"		
K1218H	18"		
K1220H	20"		

3/4" Hex Bolts

Part Number	Length (A)
K1300H	1"
K1301-1/4H	1-1/4"
K1301-1/2H	1-1/2"
K1301-3/4H	1-3/4"
K1302H	2"
K1302-1/2H	2-1/2"
K13O2-3/4H	2-3/4"



HEX HEAD BOLTS

POLE LINE HARDWARE - FASTENERS

3/4" Hex Bolts		
Part Number	Length (A)	
K1303-1/4H	3-1/4"	
K1303-1/2H	3-1/2"	
K1304H	4"	
K1304-1/2H	4-1/2"	
K1305H	5"	
K1305-1/2H	5-1/2"	
K1306H	6"	
K1306-1/2H	6-1/2"	
K1307H	7"	
K1307-1/2H	7-1/2"	
K1308H	8"	
K1308-1/2H	8-1/2"	
K1309H	9"	
K1309-1/2H	9-1/2"	
K1310H	10"	
K1311H	11"	
K1312H	12"	
K1313H	13"	
K1314H	14"	
K1315H	15"	
K1316H	16"	
K1317H	17"	
K1318H	18"	
K1320H	20"	
K1322H	22"	
K1324H	24"	
K1326H	26"	
K1328H	28"	
K1332H	32"	

7/8" Hex Bolts			
Part Number	Length (A)		
K1702-1/2H	2-1/2"		
K1704-1/2H	4-1/2"		
K1705H	5"		
K1706-1/2H	6-1/2"		
K1707H	7"		
K1707-1/2H	7-1/2"		
K1708-1/2H	8-1/2"		
K1709H	9"		
K1709-1/2H	9-1/2"		
K1710H	10"		
K1711H	11"		
K1712H	12"		
K1714H	14"		
K1716H	16"		
K1718H	18"		

1" Hex Bolts					
Part Number Length (A					
K2102H	2"				
K2103H	3"				
K2103-1/2H	3-1/2"				
K2104H	4"				
K2105H	5"				
K2157H	7"				

1" Hex Bolts			
Part Number	Length (A)		
K2158H	8"		
K2159H	9"		
K2160H	10"		
K2162H	12"		
K2164H	14"		
K2166H	16"		
K2168H	18"		
K2170H	20"		
K2172H	22"		
K2174H	24"		
K2176H	26"		
K2178H	28"		
K2180H	30"		
K2182H	32"		
K2184H	34"		
K2186H	36"		
K2188-54H	54"		
K2188-56H	56"		
K2188H	38"		
K2190H	40"		
K2192H	42"		
K2194H	44"		
K2188-50H	50"		
K2188-52H	52"		

Custom Options

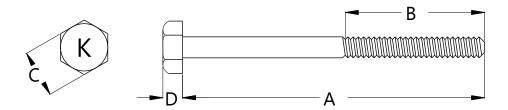
Diameters of 1-1/8, 1-1/4, 1-1/2 also available. Custom thread lengths, and assemblies available on request. Grade 5, silicon bronze, and stainless steel available upon request.





Features

Type "O" tower bolts are course threaded to a class 2 fit and are formed with a chamfered tip for ease of use. The head is stamped with the letter K. They are available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000. All bolts meet ASTM A394 standard. Hex nuts and washers should be ordered separately.



Bolt Diameter (in)	Head Flat (C)	Head Height (D)	Thread	Tensile Strength (lbs)
1/2	3/4	11/32	1/2 - 13 UNC	10,5000
5/8	15/16	27/64	5/8 - 11 UNC	16,700
3/4	1-1/8	1/2	3/4 - 9 UNC	24,700

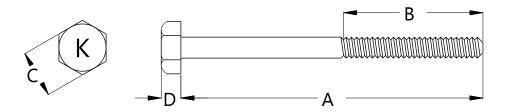
1/2" Hex Bolts		5/8" He	5/8" Hex Bolts	
Part Number	Length (A)	Part Number	Length (A)	
Please inquire	1-1/4"	Please inquire	1-1/4"	
Please inquire	1-1/2"	Please inquire	1-1/2"	
Please inquire	1-3/4"	K12O1-3/4HA394	1-3/4"	
Please inquire	2"	K12O2HA394	2"	
Please inquire	2-1/2"	Please inquire	2-1/2"	

HIGH STRENGTH BOLTS

POLE LINE HARDWARE - FASTENERS

Features

High strength grade 5 and grade 8 bolts are course threaded to a class 2 fit and are formed with a chamfered tip for ease of use. Heads are marked with the grade per ASTM standard. They are available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000. Hex nuts and washers should be ordered separately.



Bolt Diameter (in)	Head Flat (C)	Head Height (D)	Thread	Tensile Strength (lbs)
3/8	9/16	1/4	3/8 - 16 UNC	NA
1/2	3/4	11/32	1/2 - 13 UNC	17,050
5/8	15/16	27/64	5/8 - 11 UNC	27,100
3/4	1-1/8	1/2	3/4 - 9 UNC	40,100
7/8	1-5/16	37/64	7/8 - 9 UNC	55,450
1	1-1/2	43/64	1 - 8 UNC	72,700
1 1/4	1-7/8	27/32	1-1/8 - 7 UNC	105,000

3/8" Grade 8		
Part Number	Length (A)	
K1001-1/4HGR8	1-1/4"	
K1001-1/2HGR8	1-1/2"	
K1001-3/4HGR8	1-3/4"	
K1002HGR8	2"	

•	
Part Number	Length (A)
K1001GR5	1"
K1002HGR5	2"
K1002-1/2HGR5	2-1/2"

3/8" Grade 5

1/2" Grade 5		
Part Number	Length (A)	
K1100-3/4GR5	3/4"	
K1101GR5	1"	

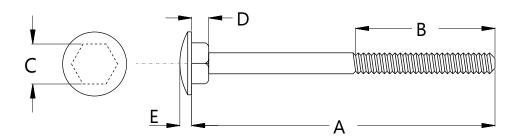
^{*}Please inquire for other sizes.

CARRIAGE BOLTS

POLE LINE HARDWARE - FASTENERS

Features

Bolts are roll threaded extra long to a course class 2 fit. They are available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000. All bolts meet IEEE C135.1 standard.

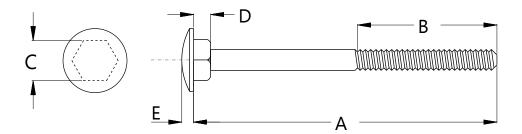


Bolt Diameter (in)	Shoulder Flat (C)	Shoulder Height (D)	Head Height (E)	Thread	Tensile Strength
3/8	9/16	3/16	3/16	3/8 - 16 UNC	4250
1/2	3/4	1/2	3/16	1/2 - 13 UNC	7800
5/8	1-5/16	5/16	3/16	5/8 - 11 UNC	12400
3/4	1-1/8	3/8	3/16	3/4 - 9 UNC	18350

Available Stocked Sizes			
Bolt Diameter	Size Increments	Length (A) Range	
1/4	1/2	3/4 to 8	
5/16	1/2	1-1/2 to 8	
3/8	1/2	1-1/4 to 8	
3/8	1	8 to 20	
1/2	1/2	1-1/2 to 8	
1/2	1	8 to 18	
5/8	1/2	1-1/2 to 8	
5/8	1	8 to 18	
3/4	1/2	2-1/2 to 8	
3/4	1	8 to 18	

Thread Chart		
Length (A) Range	Thread Length (B)	
3/4 to 3	2 * Dia. + .25 Min	
3 to 8	3 Min	
8 to 12	4 Min	
12 to 20	6 Min	

CARRIAGE BOLTS



Part Number	Diameter	Length (A)
K1O43	3/8	3
K1O43-1/2	3/8	3-1/2
K1O44	3/8	4
K1O44-1/2	3/8	4-1/2
K1O45	3/8	5
K1O45-1/2	3/8	5-1/2
K1046	3/8	6
K1046-7	3/8	7
K1047	3/8	8
K1048	3/8	9
K1O49	3/8	10
K1050	3/8	12

Common 3/8" Carriage Bolts (No Nuts)

Part Number	Diameter	Length (A)
K1003CG	3/8	3
K1003-1/2CG	3/8	3-1/2
K1004CG	3/8	4
K1004-1/2CG	3/8	4-1/2
K1005CG	3/8	5
K1005-1/2CG	3/8	5-1/2
K1006CG	3/8	6
K1006-1/2CG	3/8	6-1/2
K1007CG	3/8	7
K1007-1/2CG	3/8	7-1/2
K1008CG	3/8	8
K1008-1/2CG	3/8	8-1/2
K1009CG	3/8	9
K1010CG	3/8	10
K1011CG	3/8	11
K1012CG	3/8	12

Custom Options

Other lengths available.

Custom thread lengths, and assemblies available on request.



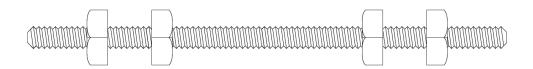
DOUBLE ARMING BOLTS

POLE LINE HARDWARE - FASTENERS

Features

Double arming bolts are assembled with four square nuts. Bolts are roll threaded their entire length class 2 fit and are formed with chamfered tips for ease of use. They are available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000. All bolts meet IEEE C135.1 standard.

Kortick's double arming (DA) bolts are used for mounting hardware on wood structures and to tie cross arms together, while maintaining correct spacing.



1/2" DA Bolts		
Part Number	Length	
K1346	16"	
K1347	18"	
K1348	20"	
K1349	22"	
K1350	24"	
K1350-26	26"	

				_
_	/Q"	ח'	A D	olts

Part Number	Length (A)
K1358	8
K1359	9
K1360	10
K1362	12"
K1364	14"
K1366	16"
K1368	18"
K1370	20"
K1372	22"
K1374	24"
K1376	26"
K1378	28"

	5.	/8"	DA	Во	lts
--	----	-----	----	----	-----

Part Number	Length (A)
K1380	30"
K1380-32	32"
K1380-34	34"
K1380-36	36"
K1380-38	38"
K1380-40	40"
K1380-42	42"
K1380-44	44"
K1380-46	46"
K1380-48	48"
K1380-50	50
K1380-52	52
K1380-54	54"

3/4" DA Bolts

J/T DA DOILS								
Part Number	Length (A)							
K1382-08	8"							
K1381	10"							
K1382	12"							
K1384	14"							
K1386	16"							

3/4" DA Bolts

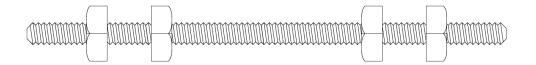
Part Number	Length (A)		
K1388	18"		
K1390	20"		
K1392	22"		
K1394	24"		
K1396	26"		
K1398	28"		
K1400-30	30"		
K1400-32	32"		
K1400-34	34"		
K1400-36	36"		
K1400-38	38"		
K1400-40	40"		
K1400-42	42"		
K1400-44	44"		
K1400-46	46"		
K1400-48	48"		
K1400-50	50"		
K1400-52	52"		
K1400-54	54"		
K1400-60	60"		



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DOUBLE ARMING BOLTS

POLE LINE HARDWARE - FASTENERS



7/8" DA Bolts			7/4" DA Bolts		1" DA Bolts		
Part Number	Length (A)		Part Number	Length (A)		Part Number	Length (
K1880	20"		K1890-48	48"		K2409-30	30"
K1882	22"		K1890-50	50"		K2409-32	32"
K1884	24"		K1890-52	52"		K2409-34	34"
K1886	26"		K1890-54 54"			K2409-36	36"
K1888	28"					K2409-38	38"
K1890	30"					K2409-40	40"
K1890-32	32"		1" DA Bolts			K2409-42	42"
K1890-34	34"		Part Number	Length (A)		K2409-44	44"
K1890-36	36"		K1409-18	18"		K2409-46	46"
K1890-38	38"		K1409-20	20"		K2409-48	48"
K1890-40	40"		K1409-22	22"		K2409-50	50"
K1890-42	42"		K1409-24	24"		K2409-52	52"
K1890-44	44"		K1409-26	26"		K2409-54	54"
K1890-46	46"		K2409-28	28"		K2409-56	56"

Custom Options

Custom lengths, and assemblies available on request.

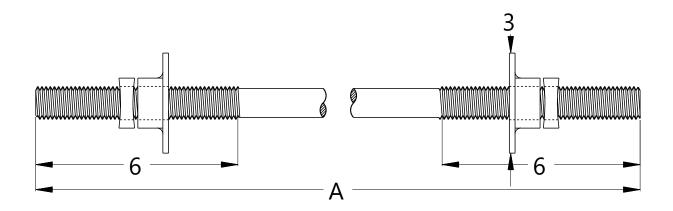


DOUBLE ARMING BOLTS

POLE LINE HARDWARE - FASTENERS

Features

Double arming studs are equipped with two washer nuts(K1531-1) and two lock nuts(K1070). Bolts are threaded 6" on either side to a class 2 fit and are formed with chamfered tips for ease of use. They are available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000. All bolts meet IEEE C135.1 standard. Lock nuts are recommended for a sturdier bond.



1" DA Bolts								
Part Number Length (
K2409-28DE	28"							
K2409-30DE	30"							
K2409-32DE	32"							
K2409-34DE	34"							
K2409-36DE	36"							
K2409-38DE	38"							
K2409-40DE	40"							

IDAL	00113
Part Number	Length (A)
K2409-42DE	42"
K2409-44DE	44"
K2409-46DE	46"
K2409-48DE	48"
K2409-50DE	50"
K2409-52DE	52"
K2409-54DE	54"

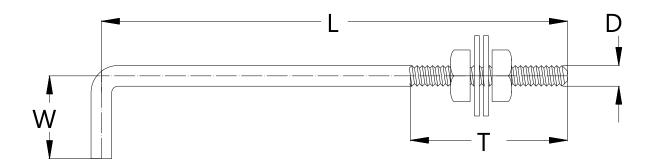
1" DA Bolts



ANCHOR BOLTS

Features

Anchor bolts are equipped with two hex nuts and two round washers. Bolts are threaded to a class 2 fit. They are available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000. All bolts meet IEEE C135.1 standard. Anchor bolts are set up in cement for construction use.



Stock Code	Diameter D	Length L	W	Thread Min T	Nuts/Washers
K8388-5810	5/8	10	1	4	Standard
K8388-5818	5/8	18	4	6	Standard
K8389	3/4	17	3	6	Standard
K8389-18-4	3/4	18	4	6	Standard
K8389-24	3/4	24	3	6	Standard
K8390	1	36	4	6	Standard
K8390A	1	36	4	6	Standard Hex
K8390B	1	36	4	6	Heavy Hex
K8391	1-1/8	44	4	6	Standard
K8392	1-1/2	54	6	7	Standard
K8393	1-3/4	60	6	8	Standard
K8394	2	66	6	8	Standard

Custom Options Available

Other sizes available.

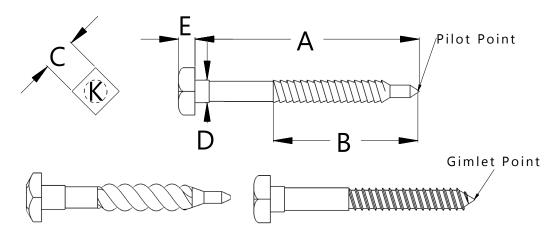
Custom lengths, and assemblies available on request.



LAG SCREWS POLE LINE HARDWARE - FASTENERS

Features

Lag screws are available with a fetter thread, spaced thread, or twist drive. They also come with either a pilot point (PP) or a gimlet point (GP). The head is stamped with the letter K. They are available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per 1059 & AG3000. All screws meet IEEE C135.8 standard.



Bolt Diameter (D)	Head Flat (C)	Head Height (E)	Min Shoulder Length
1/4	3/8	11/64	15/16
3/8	9/16	1/4	1-1/8
1/2	3/4	21/64	1-5/16
5/8	1-5/16	27/64	1-3/8
3/4	1-1/8	1/2	1-5/16

Available Stock Sizes

Top Selling Part Numbers

Bolt Diameter	Size Increments	Length (A) Range	Part #	Dia.	Length	Thread
5/16	1/2	1 to 6	K1166	1/4	2	Fetter, PP
3/8	1/2	1 to 4	K1168	1/4	3	Fetter, PP
3/8	1	4 to 12	K1O33	3/8	3	Fetter, PP
1/4	1/2	1 to 8	K1O34	3/8	4	Fetter, PP
1/2	1/2	1-1/2 to 9	K1021-1/2HL	1/2	1-1/2	Fetter, GP
1/2	1	9 to 12	K1682	1/2	4	Fetter, PP
5/8	1/2	2 to 6	K1682TD	1/2	4	Twist, PP
5/8	1	6 to 12	K1684	1/2	5	Fetter, PP
3/4	1/2	2-1/2 to 4	K1126	1/2	6	Fetter, PP
3/4	1	4 to 20	K1235	5/8	5	Fetter, GP



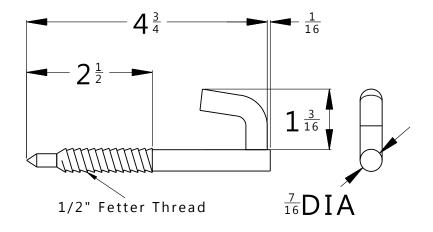
DRIVE HOOK

Features

Drive hooks can be used to support drop wire clamps, deadends, and service drops on poles and other structures. Fetter thread allows the drive hook to be driven or wrenched. They are available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.

K6077 Hot dip galvanized finish

K6077TDG Thermal diffusion galvanized finish



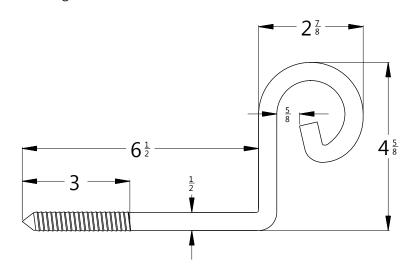
TREE HOOK

Features

Kortick tree hooks feature fetter threads to be driven into a pole or tree.

Hot dip galvanized finish KTEL10190

KTEL10190TDG Thermal diffusion galvanized finish



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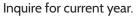
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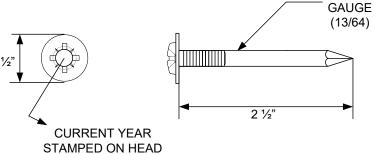


DATE NAIL POLE LINE HARDWARE - FASTENERS

Features

Date nails are used to provide a record date on wood structures.





Part Number	Year
K-200-11	2011
K-200-12	2012
K-200-13	2013
K-200-14	2014
K-200-15	2015
K-200-16	2016

ADJUSTING SCREW

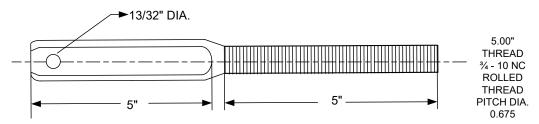
Features

Adjusting screws are used in overhead switches.

K1159ADJB Plain

K1159ADJ Hot-dip galvanized finish

K1159ADJTDG Thermal-diffusion galvanized finish

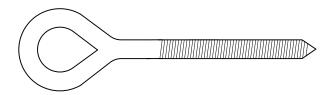


SCREW EYE & THIMBLE EYE BOLTS

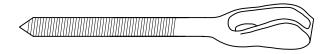
POLE LINE HARDWARE - FASTENERS

Features

Screw eye bolts and thimble eye bolts are equipped with lag threads and a gimlet point for easy installation in wood. They are used to attach guys and messengers to trees and wood structures. Eyes are solid drop forged. They are available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



Stock Code	Diameter	Length Under Eye	Eye I. D.	Approx. Ship Weight per 100
K2775	3/8	3	7/8 x 1-1/4	22
K2776	1/2	6	1-1/8 x 1-1/2	66
K2777	5/8	6-3/4	1-1/2 x 2	104
K2778	3/4	6-3/4	1-1/2 x 2	136



Stock Code	Diameter	Length Under Eye	Eye I. D.	Approx. Ship Weight per 100
K2780	1/2	6	1/2	66
K2781	5/8	6-3/4	5/8	114
K2782	3/4	6-3/4	3/4	148



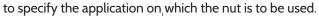
SQUARE & HEX NUTS

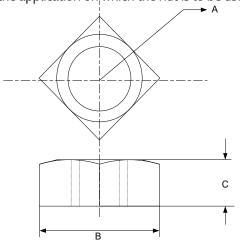
POLE LINE HARDWARE - FASTENERS

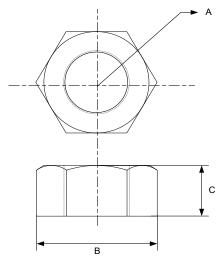
Features

Nuts are cold punched, tops are chamfered, and bearing surfaces are at right angles to the axis of the threaded hole within a tolerance of 3 degrees for nuts tapped 1-inch and smaller and 2 degrees for nuts tapped larger than 1-inch. Nuts are tapped oversize to accommodate 2-2.5 mils of galvanizing coating and have threads cut to UNC. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000. Nuts are compatible with Kortick A307 bolts.

Kortick is always willing to use different fastener assemblies to suit customer requests, please inquire, as it is important







Stock Code	Туре	Rod Diameter	Width Across Flat	Thickness (C)	Threads
K1O51	Square	1/4	7/16	7/32	20 TPI
K1O53	Square	3/8	5/8	21/64	16 TPI
K1054	Square	1/2	13/16	7/16	13 TPI
K1O55	Square	5/8	1	35/64	11 TPI
K1056	Square	3/4	1-1/8	21/32	10 TPI
K1O157	Square	7/8	1-5/16	49/64	9 TPI
K1058	Square	1	1-1/2	7/8	8 TPI
K1265	Hex	1/4	7/16	7/32	20 TPI
K1267	Hex	3/8	5/8	21/64	16 TPI
K1268	Hex	1/2	13/16	7/16	13 TPI
K1269	Hex	5/8	1	35/64	11 TPI
K1270	Hex	3/4	1-1/8	21/32	10 TPI
K1271	Hex	7/8	1-5/16	49/64	9 TPI
K1272	Hex	1	1-1/2	7/8	8 TPI
K1273	Hex	1-1/4	1-7/8	1-3/32	7 TPI



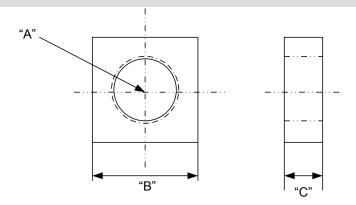
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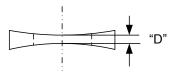
M-F LOCK NUTS

POLE LINE HARDWARE - FASTENERS

Features

Kortick M-F lock nuts are a free spinning lock nut that starts from either side and spins into place with the fingers. One half to a full turn with a wrench locks it securely. When the arched surface contacts the top of the nut, wrenching flattens the arch, deflecting the nut threads from their true helix and causing them to bind on the bolt. M-F nuts are vibration proof and available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.





Dimensions (in)

Part Number	Diameter	Width (B)	Major Thickness (C)	Minor Thickness (D)	Shipping Weight per 100
K1065	3/8	5/8	1/4		2
K1066	1/2	13/16	19/64		3
K1067	5/8	1	3/8	3/16	5
K1068	3/4	1-1/8	7/16		7
K1069	7/8	1-5/16	15/32	3/16	9
K1070	1	1-1/2	15/32	3/16	13

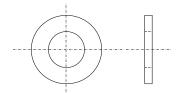


ROUND WASHERS

POLE LINE HARDWARE - FASTENERS

Features

Round washers are installed under the heads, nuts, and eyes of bolts, rods, or other threaded products to provide a broader bearing surface and increase the compression grip of a tightened nut. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.

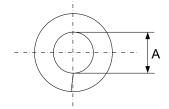


Part Number	Bolt Diameter	Hole Dia.	Outside Dia.	Thickness (Inch)	Thickness (BWG)
K1521	1/4	5/16	3/4	1/16	16
K1521-1/2	5/16	5/16	3/4	1/16	16
K1522	3/8	7/16	2	5/64	14
K1523	3/8	1/2	1-1/4	5/64	14
K1524	1/2	9/16	1-3/8	7/64	12
K1525	5/8	11/16	1-3/4	9/64	10
K1526	3/4	13/16	2	5/32	9
K1527	7/8	15/16	2-1/4	11/64	8
K1528	1	1-1/16	2-1/2	11/64	8
K1528-1-3/4	1-3/4	1-1/16	2-1/2	11/64	8

LOCK WASHERS

Features

Lock washers are designed to prevent a bolt or a screw from turning or spinning due to vibration. Made from high grade spring steel. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000. Washers conform to ASME B18.21.1.





Part Number	Bolt Diameter	Hole Dia. (A)	Outside Dia.	Thickness (Inch)	Thickness (BWG)
K1252	1/4	5/16	1/2	1/16	16
K1253	5/16	3/8	9/16	7/64	15
K1254	3/8	7/16	11/16	3/32	13
K1255	1/2	9/16	7/8	1/8	11
K1256	5/8	11/16	1-1/16	5/32	9
K1257	3/4	13/16	1-1/4	3/16	7
K1258	7/8	15/16	1-1/2	7/32	5
K1259	1	1-1/6	1-5/8	1/4	3

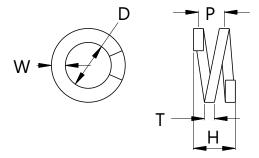


DOUBLE COIL LOCK WASHERS

POLE LINE HARDWARE - FASTENERS

Features

Double coil lock washers are made of spring steel for keeping a bolt or screw in tention. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000. Washers conform to ASME B18.21.3.

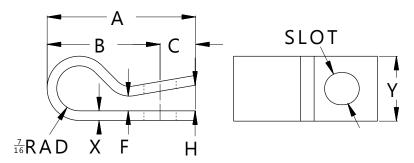


Part Number	Bolt Diameter	Hole Dia. (D)	Outside Dia.	Thickness (T)	Height (H)
K1254DC	3/8	7/16	13/16	5/32	1/2
K1255DC	1/2	9/16	1-1/32	5/32	1/2
K1256DC	5/8	11/16	1-13/16	15/64	3/4
K1257DC	3/4	13/16	1-7/16	1/4	3/4

SPRING CLIP WASHER

Features

Kortick's spring washer, also referred to as static washers, are installed under the nut of a bolt and next to the cross arm to keep units in tension when shrinkage in wood occurs. They can also be used for alignment checking. Available with HDG or TDG finish.



Part Number	Bolt Dia.	Slot	X	Υ	Α	В	С	F	Н
K2907	3/8	7/16 x 9/16	5/32	1	2-5/8	1-15/16	11/16	3/16	7/16
K2908	1/2	9/16 x 11/16	5/32	1	2-5/8	1-15/16	11/16	3/16	7/16
K29O9	5/8	11/16 x 13/16	1/4	1-3/4	3-1/2	2-9/16	13/16	5/16	11/16
K2910	3/4	13/16 x 1	1/4	1-3/4	3-1/2	2-9/16	13/16	5/16	11/16
K2910-1/2	7/8	13/16 x 1	1/4	1-3/4	3-1/2	2-9/16	13/16	5/16	11/16
K2911	1	15/16 x 1-1/8	1/4	1-3/4	3-1/2	2-9/16	13/16	5/16	11/16

To request Armorgalv® finish add "TDG" to the end of part number

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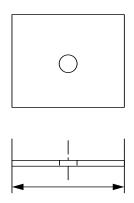


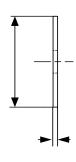
SQUARE WASHERS

POLE LINE HARDWARE - FASTENERS

Features

Square washers are installed under the heads, nuts, and eyes of bolts, rods, or other threaded products to provide a broader bearing surface and increase the compression grip of the tightened nut. They prevent the crushing of wood fibers and protect the drilled hole. Square washers also allow for alignment checking. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.





Part Number	Bolt Diameter	Width	Thickness	Hole Diameter
K1550	1/2	2	1/8	9/16
K1551	5/8	2	1/8	11/16
K1570	5/8	2-1/4	3/16	11/16
K1552	3/4	2	1/8	13/16
K1553	3/4	2-1/4	3/16	13/16
K1554	3/4	3	3/16	13/16
K1555	3/4	3	1/4	13/16
K1557	3/4	4	3/16	13/16
K1556	7/8	3-1/2	3/16	15/16
K1558	7/8	4	1/4	15/16
K1559	1	4	3/8	1-1/8
K1560	1	4	1/2	1-1/8
K1561	1	6	3/8	1-1/8
K1562	1-1/4	6	3/8	1-3/8

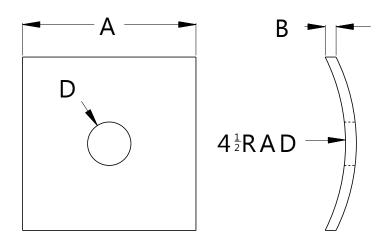


SQUARE CURVED WASHERS

POLE LINE HARDWARE - FASTENERS

Features

Square curved washers have the same function as the square flat washers except they are bent at a 4 ½ radius to fit the contour of the pole. Square curved washers, at the proper thickness, can be used to replace heavy cast washers. They comply with EEI-NEMA standard PH 10. Custom sizes available. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



Part Number	Bolt Diameter	Width	Thickness	Hole Diameter
K1590	5/8	2-1/4	3/16	11/16
K1591	5/8	2-1/2	3/16	11/16
K1582	5/8	3	1/4	11/16
K1597-5/8	5/8	4	1/4	11/16
K1592	3/4	3	1/4	13/16
K1594	3/4	3-1/4	1/4	13/16
K1597.4-3/4	3/4	4	1/4	13/16
K1597	7/8	4	1/4	15/16
K1593	1	3	1/4	1-1/8
K1596	1	3-1/2	3/8	1-1/8
K1597.4	1	4	1/4	1-1/8
K1597-1/2	1	4	3/8	1-1/8

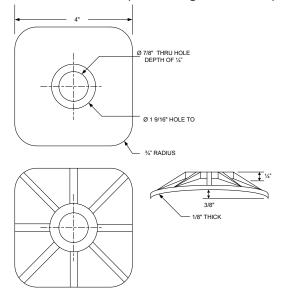


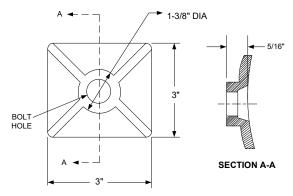
HEAVY SQUARE CURVED WASHERS

POLE LINE HARDWARE - FASTENERS

Features

Heavy square curved washers have reinforced ridges for additional strength in the critical areas. Reinforced bolt hole furthers the strength of a heavy washer. Heavy cast washers can be replaced by standard square forged washers of the proper thickness. Please inquire for forged substitute part numbers. Available with HDG or TDG finish.



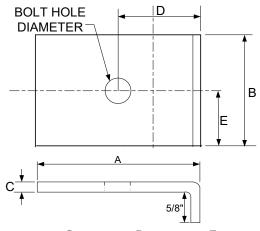


Part Number	Bolt Diameter	Width
K1582HC	5/8	3
K1592HC	3/4	3
K1597HC	3/4	4

LIP WASHERS

Features

Kortick's threaded lip washers, also referred to as a flange washer, are used on cross arm pins to provide a permanent connection for the bonding wire. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



Part Number	Bolt Dia.	Α	В	С	D	E
K1644	1/2	3	3	3/16	1-1/2	1-1/2
K1645	5/8	2-3/16	2	3/16	1-3/16	1
K1646	3/4	3	3	1/4	1-1/2	1-1/2

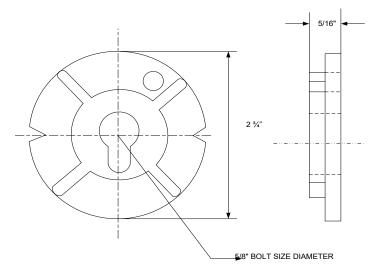


MALLEABLE IRON ROUND WASHERS

POLE LINE HARDWARE - FASTENERS

Features

Malleable iron round washers are used with poles and other wood solutions, most notably in the marine industry. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



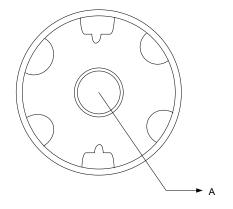
Part Number	Diameter
K1522MI	3/8
K1524MI	1/2
K1525MI	5/8
K1526MI	3/4
K1527MI	7/8
K1528MI	1
K1529MI	1-1/8
K1530MI	1-1/4

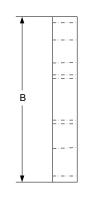
K1525MI WASHER, MALLEABLE IRON 5/8"

SHEAR PLATES

Features

Shear plates are used to create a firm seat in the pole or cross arm for wood-to-wood joint or wood to steel connections. Shear plate provides reinforcement to the bolt by increasing the web capacity to resist shearing loads. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.





Part Number	Bolt Diameter	Outside Diameter	Thickness	
K8295	3/4	4	5/8	
K8296	3/4	2-5/8	5/8	
K8298	7/8	4	5/8	
K8299	1	4	5/8	

To request Armorgalv® finish add "TDG" to the end of part number

MANUFACTURING COMPANY

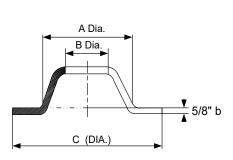
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POLE LINE HARDWARE - FASTENERS

Features

Kortick's centering washers, sometimes called pin hole adapters, are used to center the shanks of forged steel insulator pins in cross arms, prevent worn holes, and adapt ³/₄ wood hole to a 5/8 pin. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 &



DIMENSIONS IN INCHES

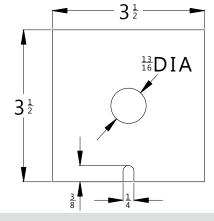
Stock Number	Α	В	С
K1630	1-1/2"	11/16"	2-3/4"
K1632	1 ½"	13/16"	2 3/4"

ANGLE PIN WASHERS

Features

Angle pin washers are notched for a nail to prevent turning. 1/4" thinkcness. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.

Part #: K1615

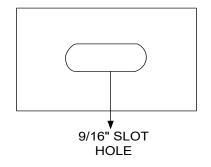


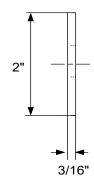
PAD MOUNTED TRANSFORMER HOLD DOWN WASHER

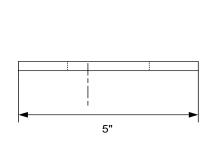
Features

Kortick pad mounted transformer hold down washers are used in padmount assemblies. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.

Part #: KXFMRWASHER









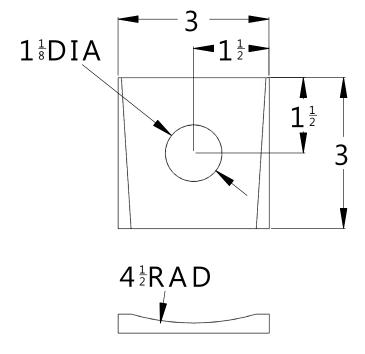
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SHIM WASHER

Features

Kortick's shim washer is used with a pole step to position the pole step at the correct angle on a fiberglass pole. The 4-1/2 in radius is tapered so that the flat back is slightly angled and the pole step is tilted slightly up. Available TDG per A1059 & AG3000.

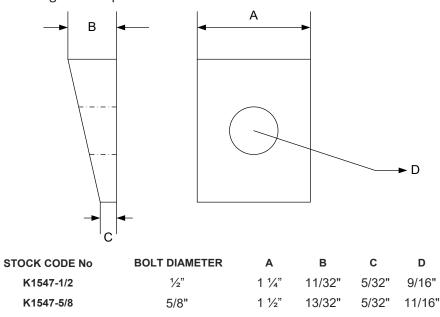
Part #: K4263WSHRTDG



BEVEL WASHER

Features

Drop forged steel Bevel washers are used for channels and flanges to bring to parallel. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



To request Armorgalv® finish add "TDG" to the end of part number

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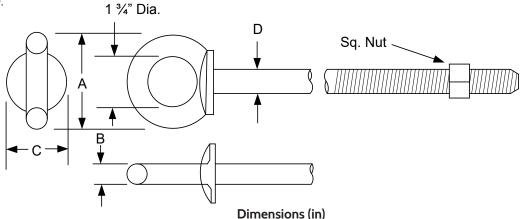


FORGED SHOULDER EYE BOLTS

POLE LINE HARDWARE - FASTENERS

Features

Forged shoulder eye bolts provide ample bearing surface, which eliminates the use of washers under the eye. They are used for hanging suspension hardware to the pole or cross arm. The one-piece shoulder eye is known for exceptional strength and durability. Shoulder eye bolts are also available in different diameter shoulders. Please inquire for customization requests. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



Diameter	Α	В	С	Thread Length
5/8	2-7/8	9/16	1-3/4	6 *
3/4	3-1/8	11/16	2	6 *
7/8	3-1/2	13/16	1-1/2	6*

F / O	Diameter
7/0	Luameter

Part Number	Length
K2556	6*
K2558	8
K2560	10
K2562	12
K2564	14
K2566	16
K2568	18
K257O	20
K2570-22	22
K2570-24	24
K2570-26	26
K2570-28	28
K2570-30	30

3/4 Diameter

Part Number	Length
K2576	6*
K2578	8
K2580	10
K2582	12
K2584	14
K2586	16
K2588	18
K2590	20
K2590-22	22
K2590-24	24
K2590-26	26
K2590-28	28
K2590-30	30

7/8 Diameter

Part Number	Length	
K2595-12	12	
K2595-14	14	
K2596	16	
K2597	18	
K2598	20	

^{*6} in length bolt has 4 in thread.

Custom Options Available

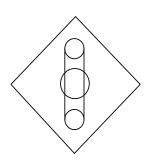
Custom lengths, thread lengths and assemblies available.

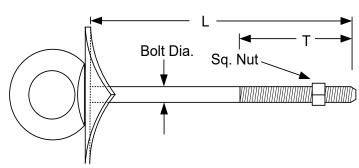


CURVED SHOULDER EYE BOLTS

Features

Curved welded washer shoulder eye bolts are used for hanging suspension hardware to a pole. Flat welded washers also available. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.





Dimensions (in)

Diameter	Washer Size
5/8	3
3/4	3
7/8	3

5/8 Diameter

Part Number	Length	Thread
K2556CW	6	3
K2558CW	8	4
K2560CW	10	4
K2562CW	12	4
K2564CW	14	6
K2566CW	16	6
K2568CW	18	6
K2570CW	20	6
K2572CW	22	6
K2574CW	24	6
K2576CW	26	6
K2576-28CW	28	8
K2576-30CW	30	8

3/4 Diameter

Part Number	Length	Thread
K2578CW	8	3
K2580CW	10	4
K2582CW	12	4
K2584CW	14	4
K2586CW	16	6
K2588CW	18	6
K2590CW	20	6
K2590-22CW	22	6
K2590-24CW	24	6
K2590-26CW	26	6
K2590-28CW	28	6
K2590-30CW	30	8

7/8 Diameter

Part Number	Length	Thread
K2595-12CW	12	6
K2595-14CW	14	6
K2596CW	16	6
K2597CW	18	6
K2598CW	20	6

Custom Options Available

Custom lengths, thread lengths and assemblies available. Custom washer sizes also available

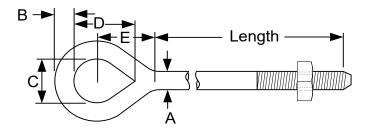


OVAL EYE BOLTS

POLE LINE HARDWARE - ATTACHMENTS: GUYING, DEAD ENDING & POLE BANDING

Features

Kortick's Oval Eye Bolts are used for guying, dead ending and attaching clevises. Oval Eye Bolts are also used in the case of specialty needs of suspension insulators and pole line hardware. All oval eyes are hot forged from A36 steel, galvanized, and assembled with standard square nut. K2640 (not pictured) Oval eye bolt is specifically used in conjunction with Kortick underground ladders. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



Dimensions (in)

Diameter (A)	В	С	D	E	Thread Length
1/2	7/16	1-1/4	1-1/2	1-3/4	6*
5/8	9/26	1-1/2	2	2	6*
3/4	5/8	1-1/2	2	2-1/4	6*

1/2 Diameter			
Part Number	Length		
K2654	6*		
K2656	8		
K2658	10		
K2660	12		
K2662	14		
K2664	16		
K2666	18		
K2668	20		

^{*6} in length bolt has 4 in thread.

Custom Options Available

Custom lengths, thread lengths and assemblies available.

= 40	D :	
5/8	Diame	eter

Part Number	Length
K2678	6*
K2680	8
K2681	10
K2682	12
K2684	14
K2685	16
K2686	18
K2687	20
K2688	22
K2689	24
K2689-26	26
K2689-28	28
K2689-30	30

3/4 Diameter

Part Number	Length
K2702	6*
K2703	8
K2704	10
K2705	12
K2706	14
K2707	16
K2708	18
K2709	20
K2710	22
K2711	24
K2712	26
K2713	28
K2714	30
K2715	32
K2716	34
K2718	36

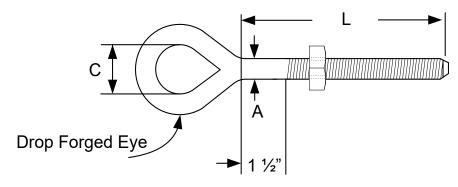


DOUBLE ARMING OVAL EYE BOLTS

POLE LINE HARDWARE - GUYING, DEAD ENDING & POLE BANDING

Features

Kortick's full thread oval eye bolts and nuts are used for guying, dead ending, as an attaching unit for clevises, suspension insulators and pole line hardware and specialty items. All oval eyes are hot forged from A36 steel, galvanized, and assembled with standard square nut. K264O (not pictured) Oval eye bolt is specifically used in conjunction with Kortick underground ladders. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



Dimensions (in)

Diameter (A)	С
5/8	1-1/2
3/4	1-1/2

5/	8	D	iar	ne	ter
-,	_	_	۰~۰	•••	٠

Length
12
14
16
18
20
22
24

3/4 Diameter

Part Number	Length
K2614	12
K2615	14
K2616	16
K2617	18
K2618	20
K2619	22
K2620	14
K2621	26
K2622	28
K2623	30

To request Armorgalv® finish add "TDG" to the end of part number

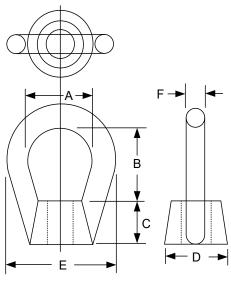


EYE NUTS & EYELETS

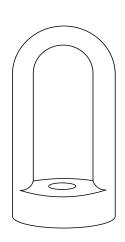
POLE LINE HARDWARE - ATTACHMENTS: GUYING, DEAD ENDING & POLE BANDING

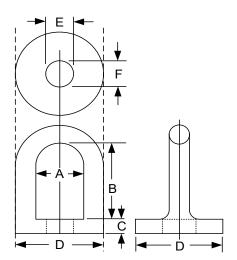
Features

Kortick's Standard Eye Nuts are used for hanging suspension type insulators or other hardware from the cross arm. Standard Long Eye Type is also used as an attaching unit on the cross arm for hanging suspension insulator strings when the upper unit is equipped with a clevis type or hook type cap. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



Stock Number	Diameter Bolt	Α	В	С	D	E	F	Max. Load (lbs)
K4210	1/2"	1-1/8"	1-1/8"	¹¹ / ₁₆ "	1-1/8"	2-1/8"	1/2"	8,500
K4212	5/8"	1-1/2"	1-3/4"	3/4"	1-3/4"	2-1/2"	1/2"	14,500
K4213	3/,"	1-1/3"	1_3/4"	3/,"	1-3/4"	2-1/2"	1/2"	21.000





Stock Number	Bolt Dia.	Max Load (lbs)	E	F	Α	В	С	D
K4411	5/8	14,500	¹¹ / ₁₆	1	1-1/4	2-3/8	3/8	2-1/4
K4412	3/4	21,000	¹³ / ₁₆	1-1/8	1-1/4	2-3/8	3/8	2-1/4
K4413	5/8	14,500	¹¹ / ₁₆	1	1-1/4	3	3/8	2-1/4
K4414	3/4	21.000	¹³ / ₁₆	1-1/8	1-1/4	3	3/8	2-1/4

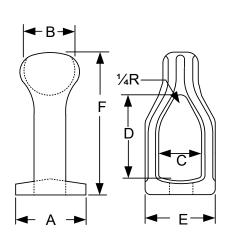


POLE LINE HARDWARE - ATTACHMENTS: GUYING, DEAD ENDING & POLE BANDING

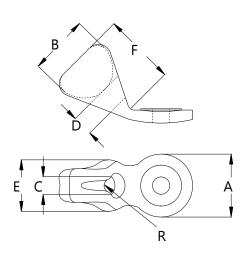
Features

Kortick's eyelets (bolt eyes) are universally used for dead ending, guying, and as an attaching unit on the cross arm for hanging hardware. The straight type is used for span or messenger single guy attachments. The angle type is used for down guy attachments. Eyes can be mounted to a pole or cross arm by either the head of a bolt or nut. The bottom slot or hole is elongated to provide sufficient clearance to insert the bolt at any angle. The wire grooves contoured to prevent the strand bending or kinking under tension. They are designed to develop greater strength than the bolts to which they are attached. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.

Straight Thimbleye



Angled Thimbleye



Straight Thimbleye

Part Number	Bolt Diam- eter	Mounting Hole	Max Guy Strand Size	Max Load	Α	В	С	D	E	F
K3130	5/8	11/16 x 1	1/2	14,500 lbs	2-1/16	1-1/2	1-5/16	2-9/16	2-1/16	4-5/16
K3131	3/4	13/16 x 1-1/8	1/2	21,000 lbs	2-1/16	1-1/2	1-5/16	2-9/16	2-1/16	4-5/16

Angled Thimbleye

Part Number	Bolt Diam- eter	Mounting Hole	Max Guy Strand Size	Max Load	Α	В	С	D	E	F
K3140	5/8	11/16	1/2	14,500 lbs	2-1/2	1-1/2	11/16	13/16	1-5/8	2-1/2
K3141	3/4	13/16	1/2	21,000 lbs	2-1/2	1-1/2	11/16	13/16	1-5/8	2-1/2

To request Armorgalv® finish add "TDG" to the end the of part number

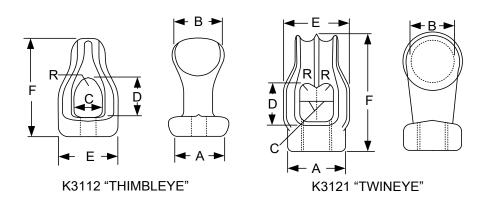


THIMBLE, TWIN, & TRIPLE EYE NUTS

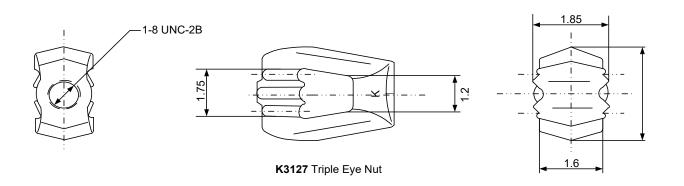
POLE LINE HARDWARE - ATTACHMENTS: GUYING, DEAD ENDING & POLE BANDING

Features

Kortick's eye nuts are used to add eyes to installations for dead ending, stub or head guying. Thimbleyes are used for one-strand guying, twineyes for two-strand guying, triple eye for three-stand guying. The eye nut develops greater strength than the rods to which they are attached. Hot dip galvanized per latest revision ASTM Spec. A153 with excess zinc removed by the centrifugal method. Also available thermal diffusion galvanized per A1059 & AG3000.



	BOLT OR ROD	DRILL AND	GUY STAND	MAX. LOAD							
FOCK No	DIAMETER	TAP	CAP MAX. DIA	(LBS)	Α	В	С	D	E	F	R
				"THIMBLEY	Ξ"						
K3110	1/2"	33/64-13 thread	7/16"	8,500	1-1/2"	1-1/2"	7/8"	1-3/8"	1-7/8"	3-1/4"	1/4"
K3111	5/8"	41/64-11 thread	7/16"	14,500	1-1/2"	1-1/2"	7/8"	1-3/8"	1-7/8"	3-1/4"	1/4"
K3112	3/4"	49-64-10 thread	7/16"	21,000	1-1/2"	1-1/2"	7/8"	1-3/8"	1-7/8"	3-1/4"	1/4"
K3113	1"	1-1/64-8 thread	5/8"	42,000	1-3/4"	1-5/8"	1-1/4"	1-5/8"	2-1/4"	3-7/8"	13/32"
				"TWINEYE	'						
K3120	5/8"	41/64-11 thread	1/2"	14,500	1-7/8"	1-1/2"	1-5/16"	2-1/8"	4-3/32"	1/4"	1/4"
K3121	3/4"	49-64-10 thread	1/2"	21,000	1-7/8"	1-1/2"	1-5/16"	2-1/8"	4-3/32"	1/4"	1/4"
K3122	1"	1-1/64-8 thread	1/2"	42,000	1-7/8"	1-1/2"	1-5/16"	2-1/8"	4-3/32"	1/4"	1/4"



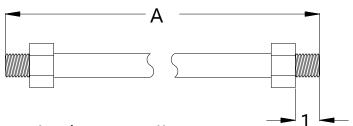


PISA RODS

POLE LINE HARDWARE - ATTACHMENTS: GUYING, DEAD ENDING & POLE BANDING

Features

Pisa rods attach to anchors and eye nuts. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



Part Number	Bolt Diameter	Length	Notes
KA11165	5/8	7 ft	
KA11160	3/4	3-1/2 ft	
KA11170	3/4	7 ft	
KA11170HS	3/4	7 ft	High Strength
KA11200	1	3-1/2 ft	
KA11210	1	7 ft	
KA11210HS	1	7 ft	High Strength

To request Armorgalv® finish add "TDG" to the end of the part number



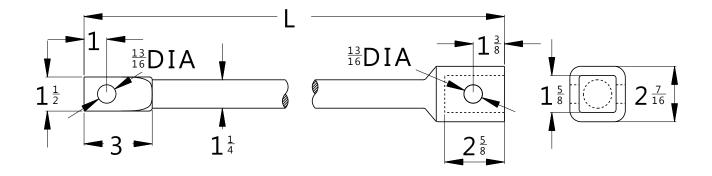
POLE LINE HARDWARE - ATTACHMENTS: GUYING, DEAD ENDING & POLE BANDING

Features

Anchor rod extensions extend the length of ground anchors to allow connection between installed anchors and guy wires. Length is 44-1/2in. Other sizes and styles available upon request.

KXENT32083400 Hot-dip galvanized finish

KXENT32083400TDG Thermal-diffusion galvanized finish



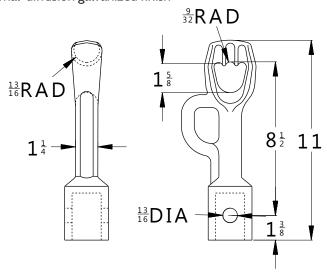
TRIPLEYE GUY ADAPTER

Features

Guy adapters attach to anchor rod extensions. The tripleye guy addapter allows for three-strand guying and includes a pulling eye. Other sizes and styles availbale upon request.

KXENT32083399 Hot-dip galvanized finish

KXENT32083399TDG Thermal-diffusion galvanized finish





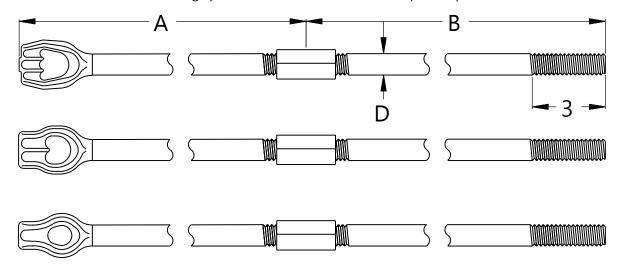
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COUPLING ANCHOR RODS

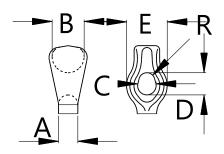
POLE LINE HARDWARE - ATTACHMENTS: GUYING. DEAD ENDING & POLE BANDING

Features

Kortick guy anchor rods feature a drop forged head and rolled threads. They can support bewteen one and three strand guying. A threaded coupling allows long rods to be transported more easily and also eases their removal. Anchor rods are available with corrosion protective Armorgalv AG3000 certified coating. This is highly recommended since anchor rods are often used in highly corrosive environments. Please inquire for part numbers,



Length (ft)	Section A (ft)	Section B (ft)
5	5	NA
6	6	NA
7	7	NA
8	6	2
9	6	3
10	6	4
12	6	6



			-		
Α	В	С	D	Ε	F
1/2	1-1/4	1/2	9/16	1-1 /4	3 /16
5/8	1-3 /8	9 /16	11/16	11/2	1/4
3 /4	1-1/2	11 /16	13/16	1-5/8	9/32
1	1-5/8	15 /16	1-1 /8	2-1/16	13 /32

Thimbleye

To request Armorgalv® finish add "TDG" to the end of part number

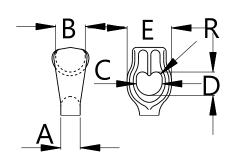
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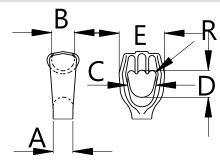
COUPLING ANCHOR RODS

POLE LINE HARDWARE - ATTACHMENTS: GUYING, DEAD ENDING & POLE BANDING



Twineye

Α	В	C	D	E	R
5/8	1-1/4	15 /16	7/8	1-3/4	7/32
3 /4	1-3/8	1-1 /16	1	2	1/4
1	1-1/2	1-5 /16	1-3 /16	2-1/4	5/16
1-1/4	1-5/8	1-1/2	1-1/4	2-7/8	3 /8



Tripleye

Α	В	C	D	E	R
3 /4	1-3/8	1-1 /2	1-11/16	2-1/2	7/32
1	1-1/2	1-5/8	1-11/16	2-9/16	7/32
1-1/4	1-5/8	1-11/16	1-11/16	2-3/4	7/32

Length	Thimbleye	Twineye	Tripleye	Strength
		5/8" Rod		
5	K3315	K3525		17000lbs
6	K3316	K3526		17000 lbs
7	K3317	K3526		17000 lbs
8	K3318	K3528		17000 lbs
		3/4" Rod		
6	K3326	K3456	K3826	25,000 lbs
7	K3327	K3457	K3827	25,000 lbs
8	K3328	K3458	K3828	25,000 lbs
9	K3329	K3459	K3829	25,000 lbs
10	K3330	K3460	K2830	25,000 lbs
		1" Rod		
7	K3337	K3467	K3847	38,000 lbs
8	K3338	K3468	K3848	38,000 lbs
9	K3339	K3469	K3849	38,000 lbs
10	K3340	K3470	K3850	38,000 lbs
12	K3342	K3472	K3852	38,000 lbs
		1-1/4" Rod		
10		K3540	K3870	60,000lbs
12		K3542	K3872	60,000lbs

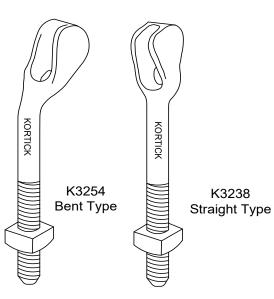


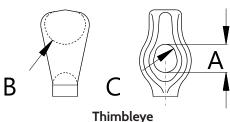
THIMBLE EYE BOLTS

POLE LINE HARDWARE - ATTACHMENTS: GUYING. DEAD ENDING & POLE BANDING

Features

Kortick thimbleye bolts are quipped with one regular cold punched square nut. They are universally used for attaching guys to poles and cross arms, for dead-ending and for down guying. They are forged in two styles, STRAIGHT type and 45-degree ANGLE or BENT type. Fabricated with the "thimbleye" drop forged on the bolt, eliminating the use of separate guy thimble. Eyes (detailed below) develop greater strength than the bolt itself. Threads are cut 6 inches long, course thread series, class 2 fit before galvanizing. Hot dip galvanized, per latest revision ASTM spec A153, threads cleaned of excess zinc by the centrifugal method. Nuts are tapped after galvanizing, and when assembled ensure a perfect "finger fit." We recommend curved washers be placed under the nuts with guy or lift plates under the eyes to distribute the load strain set up by the guys over a greater surface area. Square washers or curved washers and guy or lift plates used with these eye bolts are extra, and should be specified and ordered separately. See plates section of catalog.





Dia.	Α	В	С	Minimum Breaking Strength
5/8	5/8-3/4	11/16	9/16	12,500lbs
3/4	5/8-3/4	11/16	9 /16	19,000lbs

BOLT, ST THIMBLEYE 5/8" X 8"

BOLT, ST THIMBLEYE 5/8" X 10"

BOLT, ST THIMBLEYE 5/8" X 12"

Stock Code Description

K3215 K3216

K3217

\exists	Θ	K321	18	BOLT, ST THIMBLEYE 5/8" X 14"
		K322	20	BOLT, ST THIMBLEYE 5/8" X 16"
		K322	22	BOLT, ST THIMBLEYE 5/8" X 22"
Stock Code	Description	K322	22-24	BOLT, ST THIMBLEYE 5/8" X 24"
K3254	BOLT, BENT THIMBLEYE 5/8" X6"(4" THR	EAD) K32 2	22-26	BOLT, ST THIMBLEYE 5/8" X 26"
K3255	BOLT, BENT THIMBLEYE 5/8" X8"	K322	22-28	BOLT, ST THIMBLEYE 5/8" X 28"
K3256	BOLT, BENT THIMBLEYE 5/8" X10"	K322	22-30	BOLT, ST THIMBLEYE 5/8" X 30"
K3257	BOLT, BENT THIMBLEYE 5/8" X 12			
K3258	BOLT, BENT THIMBLEYE 5/8" X14"	K323	35	BOLT, ST THIMBLEYE 3/4" X 8"
K3260	BOLT, BENT THIMBLEYE 5/8" X16"	K323	36	BOLT, ST THIMBLEYE 3/4" X 10"
K3262	BOLT, BENT THIMBLEYE 5/8" X20"	K323		BOLT, ST THIMBLEYE 3/4" X 12"
K3264	BOLT, BENT THIMBLEYE5/8" X24"	K323		BOLT, ST THIMBLEYE 3/4" X 14"
		K324		BOLT, ST THIMBLEYE 3/4" X 16"
		K324		BOLT, ST THIMBLEYE 3/4" X 18"
K3275	BOLT, BENT THIMBLEYE, 3/4"X8"	K324		BOLT, ST THIMBLEYE 3/4" X 20"
K3276	BOLT, BENT THIMBLEYE, 3/4"X10"	N324	+2	BOLT, ST THIIVIBLETE 3/4 X 20
K3277	BOLT, BENT THIMBLEYE, 3/4"X12"	K324	40	BOLT, ST THIMBLEYE 1" X 14"
K3278	BOLT, BENT THIMBLEYE, 3/4"X14"	K324		,
K3280	BOLT, BENT THIMBLEYE, 3/4"X16"			BOLT, ST THIMBLEYE 1" X 16"
K3281	BOLT, BENT THIMBLEYE, 3/4"X18"	K325		BOLT, ST THIMBLEYE 1" X 18"
K3282	BOLT, BENT THIMBLEYE 3/4"X 20"	*	(6" STANDARD THREAD
*	6" STANDARD THREAD	MANUEACTURING	COMPA	NIV

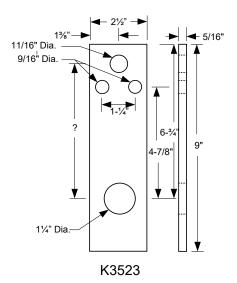
MANUFACTURING COMPANY POLE LINE HARDWARE DROP PRESS-UPSET FORGINGS

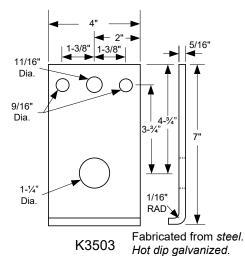
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GUY PLATES

POLE LINE HARDWARE - ATTACHMENTS: GUYING, DEAD ENDING & POLE BANDING





CURVED SQUARE WASHERS are recommended for use under the nut of the guy fitting in conjunction with the lift plates.

KORTICK LOAD AND LIFT GUY PLATES are used behind the eyes of Angle "Thimbleye" bolts to increase their load capacity. The elongated hole is shaped so the base of the "Thimbleye" fits INTO it, adding support or "lift" to the eyebolt.

Plates distribute the load in tension over a greater surface area and reinforce the wood fibers of a pole against shear resulting from excessive down pull.

wood libers of a pole against siteal resulting from excessive down pull.				
Curved Plates – 2-½ Inches Wide by 7 Inches Long for Guy and Straight-Away Loops				
Stock Number	Plate Thickness	Fit Diameter Eyebolt	Diameter Mounting Holes	Size Oval hole
K3501	1/4	5/8	11/16	1-1/16 x 1-1/4
Flat 3	Hole Plates – 2			Long
Stock Number	Plate Thickness	Fit Diameter Eyebolt	Diameter Mounting Holes	Size Oval hole
K3506	1/4	3/4	9/16	13/16 x 1-1/16
Curved	2 Hole Plates	- 2-1/2 Inches \	Nide by 7 Inch	es Long
Stock Number	Plate Thickness	Fit Diameter Eyebolt	Diameter Mounting Holes	Size Oval hole
K3510	3/16	5/8	9/16	1-1/16 x 15/16
K3514	3/16	3/4	9/16	13/16 x 1-1/16
K3511	1/4	3/4	9/16	13/16 x 1-1/16
K3512	5/16	1	9/16	1-1/8 x 1-7/16
Curved	3 Hole Plates			es Long
Stock Number	Plate Thickness	Fit Diameter Eyebolt	Diameter Mounting Holes	Size Oval hole
K3516	3/16	5/8	9/16	11/16 x 15/16
K3519	1/4	5/8	9/16	11/16 x 15/16
K3520	5/16	5/8	9/16	11/16 x 15/16
K3521	3/16	5/8	9/16	13/16 x 1-1/16
K3517	1/4	3/4	9/16	13/16 x 1-1/16
K3522	5/16	3/4	9/16	13/16 x 1-1/16
K3518	5/16	1	9/16	1-1/16 x 1-5/16
Flat 4 H	Hole Plates – 2	-½ Inches Wid	e by 9" Inches	Long
Stock Number	Plate Thickness	Fit Diameter Eyebolt	Diameter Mounting Holes	Size Oval hole
K3523	5/16	1 & Under	11/16	1-1/4
K3524	5/16	1 & Under	11/16	1-1/4
Flat 4	Hole Lip Plates		_	Long
Stock Number	Plate Thickness	Fit Diameter Eyebolt	Diameter Mounting Holes	Size Oval hole
K3503	5/16	1 & Under	11/16	1-1/4
K3504	5/16	1 & Under	11/16	1-1/4



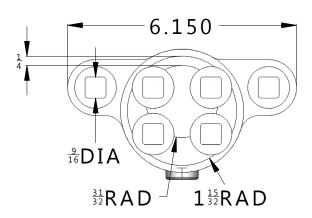
SIDEWALK GUY FITTING

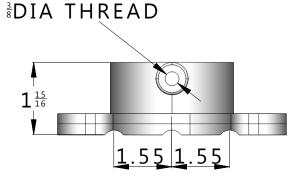
POLE LINE HARDWARE - ATTACHMENTS: GUYING. DEAD ENDING & POLE BANDING

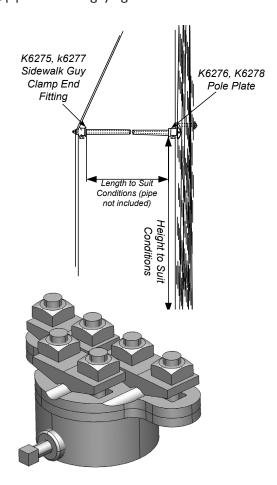
Features

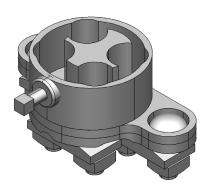
Kortick sidewalk guy arm pipe fittings fit both 2in and 2-1/2in diameter pipes and can accommodate one, two, or three wires. A pin secures the fitting in place. They are used where fixed length arms are impractical. Attaching the fittings to the unthreaded ends of any length standard pipe completes a guy arm unit to extend across any width sidewalk or right of way where head room must be maintained. Assembled with regular square head machine bolts and square nuts, fittings are hot dip galvanized. Field drawing for reference only, pipe and other guying hardware not included.

K6275 Hot-dip galvanized finishK6275TDG Thermal diffusion galvanized finish









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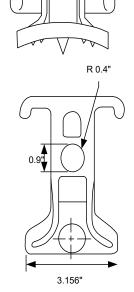
POLE LINE HARDWARE - ATTACHMENTS: GUYING, DEAD ENDING & POLE BANDING

Features

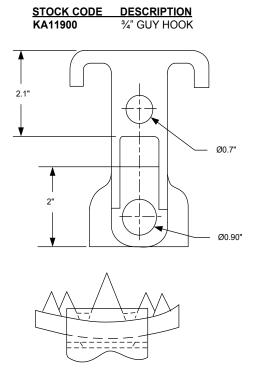
Cast Guy hook attachments available for 5/8 and 3/4 bolts. Used for down guy applications

KA11875 5/8 Guy Hook **KA11900** 3/4 Guy Hook

KA11970 Combination 3/4 Guy Hook



STOCK CODE DESCRIPTION
KA11875 5/8" GUY HOOK

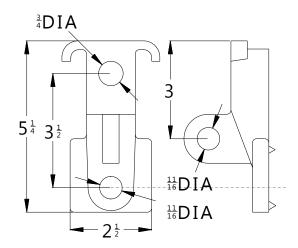


COMBINATION POLE EYE/GUY HOOK

Features

Combination cast guy hook and pole eye plate attachments available for 3/4 bolts. It is a multifunctional attachment.

KXGEP5A Combination 3/4 Guy Hook



To request Armorgalv® finish add "TDG" to the end the of part number



POLE EYE PLATES

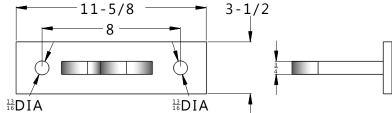
POLE LINE HARDWARE - ATTACHMENTS: GUYING, DEAD ENDING & POLE BANDING

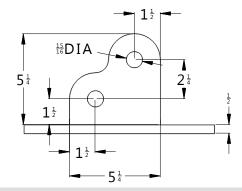
Features

Kortick heavy pole eye plates are through welded for heavy duty applications. Available in flat and round base. Please inquire for custom design and part numbers. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per ASTM A154 or thermal diffusion galvanized per ASTM A155 or the galvanized per ASTM A155

nized per A1059 & AG3000.

KA11980 Hot-dip galvanized finish



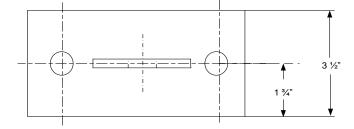


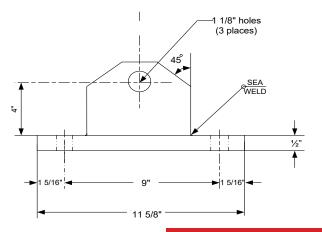
DEAD END TEE

Features

Regular duty dead end tee. Material is A36 steel,tensile strength is 40,000lbs. Multiple tee designs are available; please inquire for part numbers, designs, and strengths. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.

KX101218 Hot-dip galvanized finish





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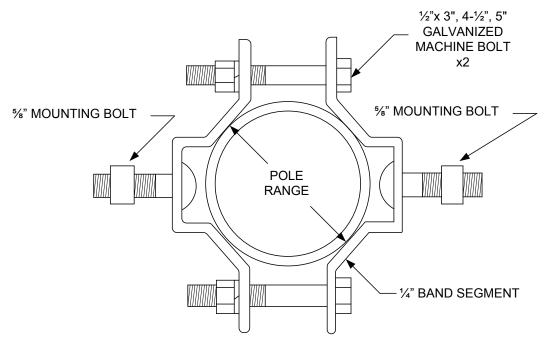


SINGLE AND DOUBLE CUP BANDS

POLE LINE HARDWARE - ATTACHMENTS: GUYING, DEAD ENDING & POLE BANDING

Features

Kortick single and double cup pole bands (K8183 series) supply additional attaching points for pole line hardware items, specialty items, and for dead end or guying lines. Available hot dip galvanized per ASTM A153.



Stock Code	Description	Pole (O.D.) Range
K8183	BAND, POLE 3-1/2"-4" SINGLE CUP	3.5-4"
K8184	BAND, POLE 4-5" SINGLE CUP	4-5"
K8185	BAND, POLE 5"- 5-1/2" SINGLE CUP	5-5.5"
K8193 K8194 K8195	BAND, POLE 3-1/2-4" DOUBLE CUP BAND, POLE 4-5" DOUBLE CUP BAND, POLE 5-15/12 DOUBLE CUP	3.5-4" 4-5" 5-5.5"

^{*} SINGLE CUP BANDS are equipped with ONE 5%" MOUNTING BOLT

To request Armorgalv® finish add "TDG" to the end the of part number



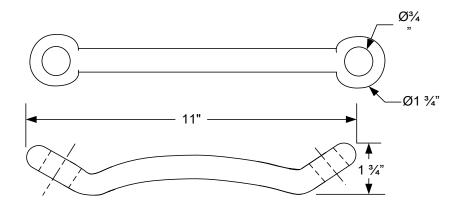
^{*} DOUBLE CUP BANDS are equipped with TWO 5%" MOUNTING BOLT

THREE PIECE POLE BAND

POLE LINE HARDWARE - ATTACHMENTS: GUYING, DEAD ENDING & POLE BANDING

Features

Kortick three piece round bar pole bands (K8193 series) for steel poles. Round bar design limits corrosion on the steel pole. Three-piece design displaces load across from eye to eye of opposing band section, taking load away from fastener. These bands are popular with light rail, electric bus, and other municipality uses on the west coast. Available hot dip galvanized per ASTM A153.



Stock Code	Description	Material	Pole (O.D.) Range	CUT LENGTH	
K8196	BAND, POLE #1 3 PC	3/4"	4.5-5.5"	12-5/8"	
K8197	BAND, POLE #2 3 PC	3/4"	6-7.25"	14-1/2"	BOLT, LOCK
K8198	BAND, POLE #3 PC	3/4"	7-8.25"	15-1/2"	WASHER
K8199	BAND, POLE #4 3 PC	3/4"	8-9.25"	17"	AND NUT x3
K8200	BAND, POLE #5 3 PC	3/4"	9-10.25"		
K8202	BAND, POLE #7 3PC	1"	9-10.25"	_	-[1 /
K8203	BAND, POLE SPL 3 PC	3/4"	10-11.25"		4
K8204	BAND, POLE SPL 3 PC	1"	10-11.25")
K8204-3/4	BAND, POLE SPL 3 PC	3/4"	10-11.25"		
K8205	BAND, POLE SPL 3 PC	1"	11-12.25"		
* All Bolts an	d Nuts Per ASTM A325				
Hot Dipped G	alvanized				\ \
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MANUFACTURING COMPANY POLE LINE HARDWARE DROP PRESS-UPSET FORGINGS

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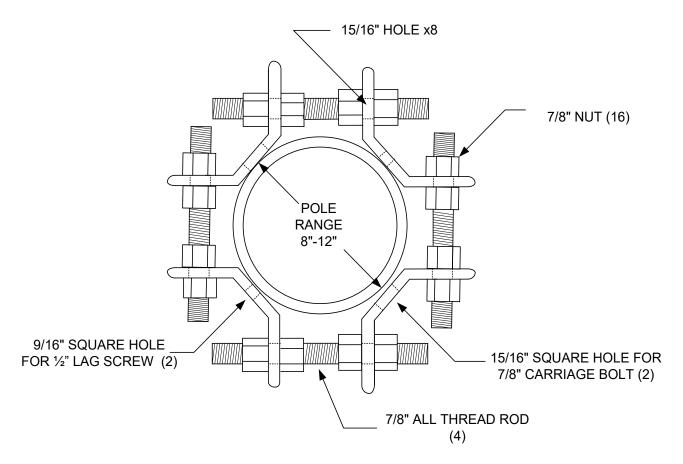
FOUR WAY POLE BAND

POLE LINE HARDWARE - ATTACHMENTS: GUYING. DEAD ENDING & POLE BANDING

Features

Four way pole bands provide flexibility for attaching dead end and guy lines. They are clamped to the pole with four 7/8" DA bolts.

Part #: K5071 & K5072



K5071 WITH A STUD BOLT **K5072** WITH 2 STUD BOLTS

NOTE:

- 1. ALL PARTS GALVANIZED
- 2. SECTIONS ARE MADE OF 1/2"x4" STEEL
- 3. NUTS ARE INCLUDED
- 4. 7/8"x3" CARRIAGE BOLT AND NUT INCLUDED
- 5. LAG SCREW NOT INCLUDED

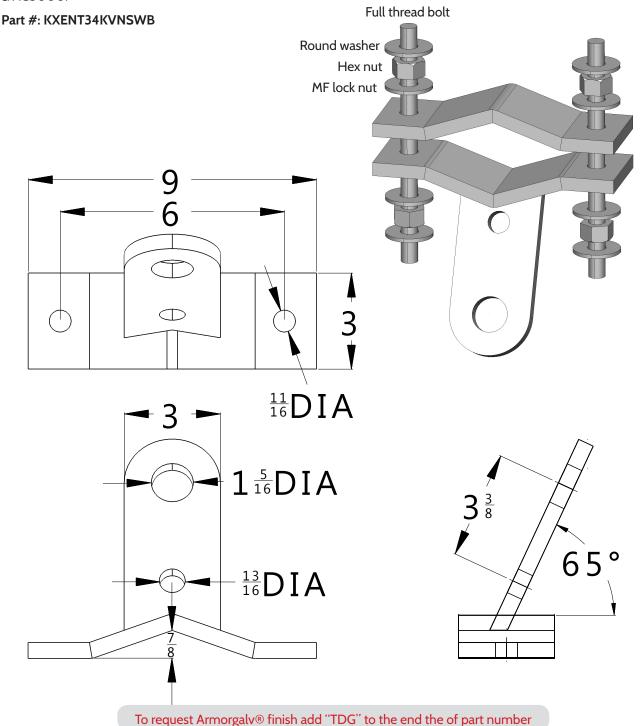


NEUTRAL SUPPORT WIRE BRACKET

POLE LINE HARDWARE - ATTACHMENTS: GUYING, DEAD ENDING & POLE BANDING

Features

Neutral support wire bracket includes upper and lower brackets, two 5/8 x 9 in DA bolts, four hex nuts, four MF lock washers and for round washers. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



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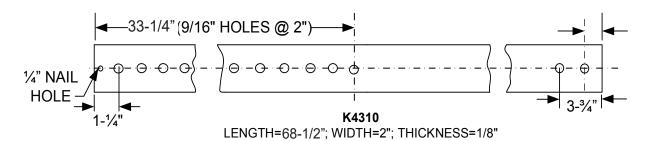


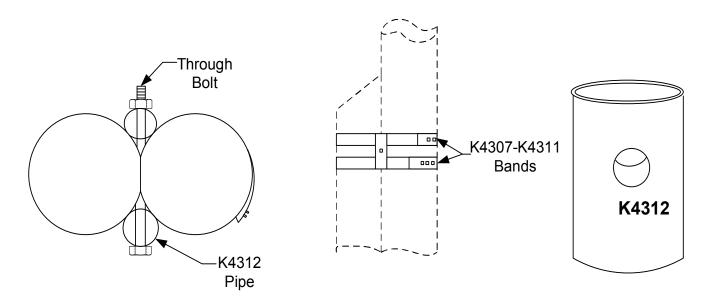
STUBBING BANDS AND PIPES

POLE LINE HARDWARE - ATTACHMENTS: GUYING. DEAD ENDING & POLE BANDING

Features

Kortick stubbing reinforcing bands and fittings add years of life to a pole with a rotted, weakened butt. To use, set a correct length stub, approximately the same diameter and ground depth as the pole, and securely bind stub and pole above the ground line at two or more points. Tighten by inserting through bolt into one slotted hole of the band and engage one of the holes on the opposite side. Tighten the nut and the bands are drawn into the pockets between the pole and stub with the stubbing pipe in place. Please inquire about custom length and hole dimensions.



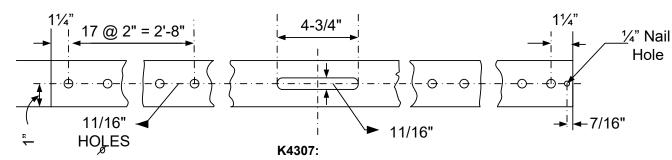


STOCK					BOLT	HEIGHT OF
CODE	TYPE	THICKNESS	WIDTH	LENGTH	HOLE	POLE (FT)
K4307	BAND	12 B.W.G.	2"	96"	11/16"	50
K4309	BAND	12 B.W.G.	2"	120"	9/16"	50 or OVER
K4310	BAND	12 B.W.G.	2"	68-1/2"	9/16"	40 or LESS
K4311	BAND	12 B.W.G.	2"	89-1/2'	9/16"	40 or LESS
K4328	BAND	12 B.W.G.	2"	76-1/2"	9/16"	40 or LESS
K4312	PIPE	EXTRA HEAV	Y	5"	3/4"	ALL

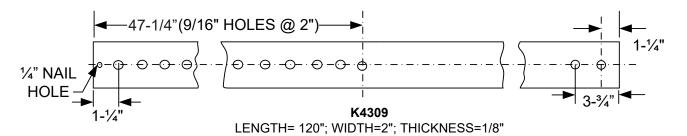


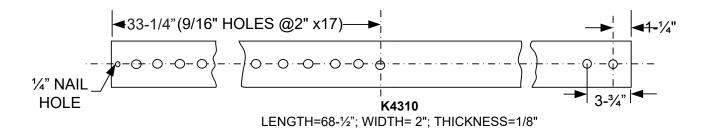
STUBBING BANDS

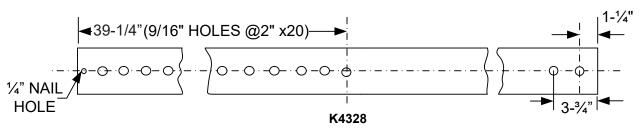
POLE LINE HARDWARE - ATTACHMENTS: GUYING, DEAD ENDING & POLE BANDING



LENGTH= 96"; WIDTH = 2"; THICKNESS= 1/8"







LENGTH=76-1/2"; WIDTH= 2"; THICKNESS=1/8"

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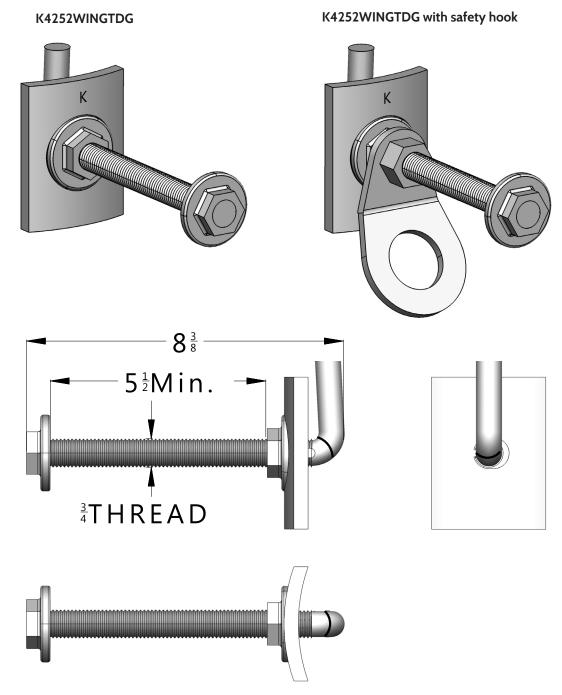
POLE STEP FOR COMPOSITE & STEEL POLES,

POLE LINE HARDWARE - POLE STEPS

Features

These pole steps hook into a hole in a hollow composite or steel pole. They feature a notch to keep the step from turning under pressure. The curved washer is stamped with a K. They come assembled as shown, with a rubber O ring to hold the curved washer on prior to installation. Available with or without safety hook. Thermal diffusion galvanized per A1059 & AG3000.

Part #: K4252WINGTDG





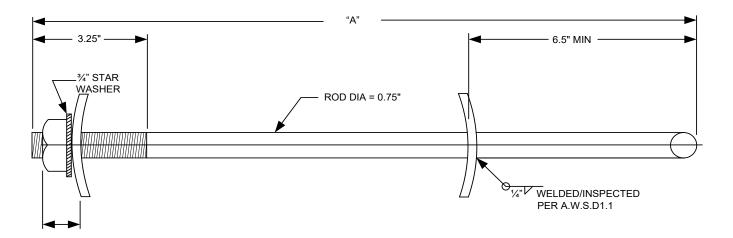
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THROUGH POLE STEPS FOR FIBERGLASS

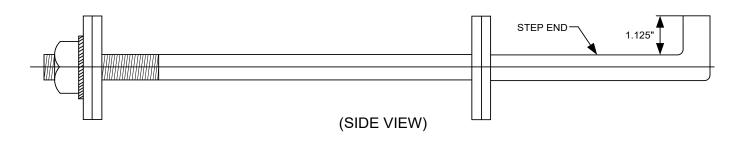
POLE LINE HARDWARE - POLE STEPS

Features

Kortick through pole steps are for fiberglass poles. They have the same drive point design features as the K4252 series. They are available with the square or square curved washer welded. Coarse thread class 2 threads assembled with square washer, star washer, and square nut. The low carbon steel step is able to withstand 750lbs static loading without deformation. Please inquire about customization options. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



(TOP VIEW)



PART # "A" K4272 19" K4276 24"

To request Armorgalv® finish add "TDG" to the end the of part number



53

Features

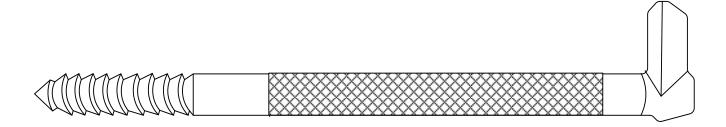
Kortick wood pole steps are driven into wood poles to provide secure foot and hand holds for climbing. Typically, pole steps start no less than 8 feet above the ground and are spaced 18" apart on alternate sides of the pole. They are generally located in line with the lead in the same vertical plane.

The K4252 Pole step for wood poles has a "handy drive" head that is reinforced at the bottom to prevent bending the head when driving. Its surfaces are rounded and smooth, eliminating accident hazards caused by sharp corners or edges. A raised ring indicates correct driving depth. The pole step is also available with Kortick knurling (K4252K) for improved tread grip. Kortick pole steps are forged from "carbon" steel bars. Hot dip galvanized, per latest revision ASTM Spec A153. Excess zinc eliminated by the centrifugal method. Threads are fetter drive with a cone point for easy driving into wood. Also available thermal diffusion galvanized per A1059 & AG3000. *Please inquire about customization options.

KORTICK		

Pole Step for Wood Poles

Part Number	Bolt Diameter	Overall Length	Height Hook	Thread Length
K4252	5/8	10	1	2-3/4
K4258	3/4	14	1	4-3/4



K4252K

To request Armorgalv® finish add "TDG" to the end the of part number

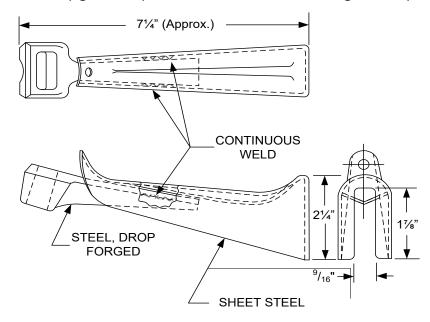


DETACHABLE POLE STEPS

POLE LINE HARDWARE - POLE STEPS

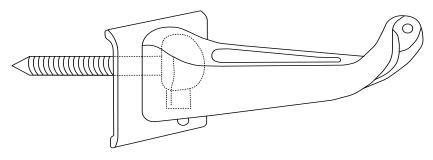
Features

Detachable pole steps (K4553) allow for steps to be added as needed to keep unauthorized climbing. The mounting plate lag assembly (K4552) is permanently attached and the step is carried on the lineman's belt. The K4570 is a combination pole step. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



NOTE 1: THIS END FITS K-4552 & A.T.&T. CO. "B" POLE STEP MOUNTINGS.

Part Number	Description	Dimensions
K4552	Lag plate assembly	Plate: 2-1/4 x 2-3/4 x 3/16. Lag: 1/2 x 4
K4553	Detachable step	7-1/4 length
K457O	Step and lag plate combination	



Mounting Detail

To install, assemble washer, which acts as a bearing plate for the step, to the Lag Screw and drive the lag into the pole until the washer corners bite into the pole surface. Slip the slotted back of the step over the special grooved head of the Lag Screw. The protruding lug on the washer keeps the step in position when mounted. A nail driven through the nail hole prevents the plate from possible turning. Steps, when mounted, project 5-½ inches from the face of the plate and are turned up at the extreme end to prevent linemen from slipping.

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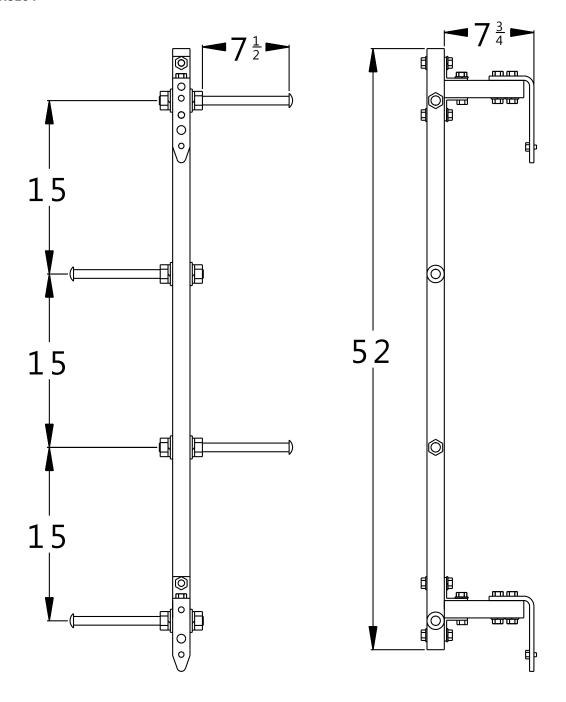
TOWER LADDER

POLE LINE HARDWARE - POLE STEPS

Features

Kortick's staggered step tower ladder provides permanent pole access. After inserting the access ladder in the mounting clips, the two cap screws can be tightened against the pole for stability. Galvanized per ASTM A123, except for nuts, washers and bolts, which meet A153.

Part #: K8264



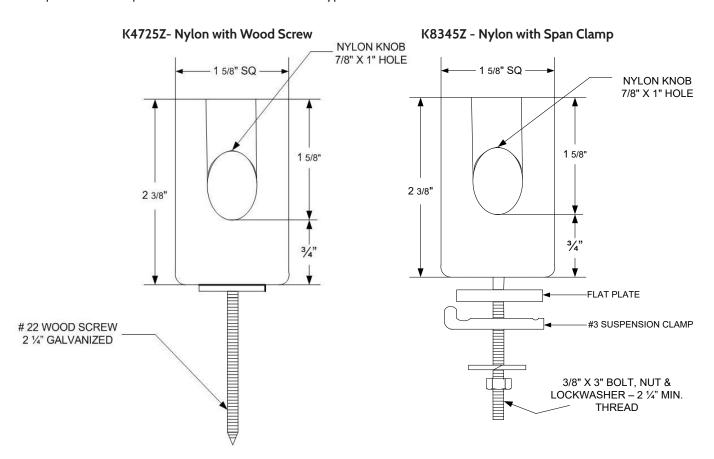


WIRE HOLDERS

POLE LINE HARDWARE - SECONDARY & SERVICE HARDWARE

Features

Kortick wire holders lend themselves readily to all service requirements. Available in multiple variations with periscope brackets, span clamps, and periscope extensions. Wire holders are standard in nylon with porcelain available upon request. Please inquire for custom variations, thread types, and materials.



Wire Holders

Part Number	Fastener	Hardware	Material
K4725	2-1/4 Lag Screw	None	Porcelain
K4725Z	2-1/4 Lag Screw	None	Nylon
K4726	3" Lag Screw	None	Porcelain
K4726Z	3" Lag Screw	None	Nylon
K4727	4" Lag Screw	None	Porcelain
K4727Z	4" Lag Screw	None	Nylon
K5927-3P-2	3/8 x 2-1/8 Stud	Hex nut & lock washer	Nylon
K8345Z	3/8 x 2-1/8 Stud	Suspension clamp etc.	Nylon

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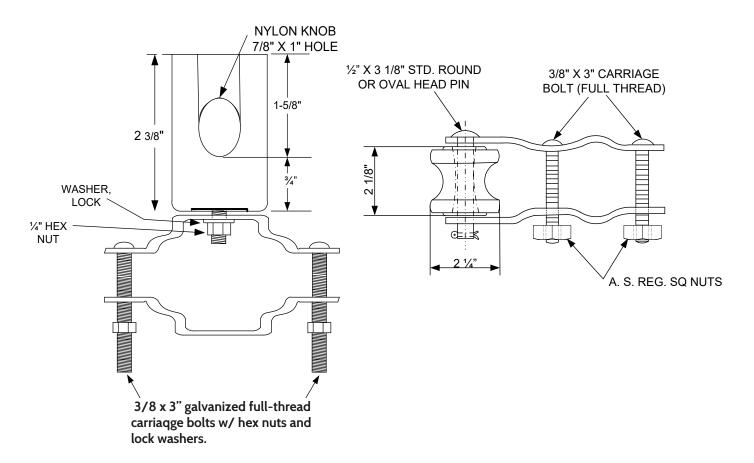
PERISCOPE BRACKETS

POLE LINE HARDWARE - SECONDARY & SERVICE HARDWARE

Features

Kortick's periscope brackets fit a range of pipe from 1-1/4" to 4". Hot dip galvanized per ASTM A153.

Part #: K4593Z Part #: K4582



Part Number	Descripition	Use
K4593Z	Nylon Periscope Bracket	For 1-1/4 - 2-1/2 pipe.
KYWP2712325	Nylon Periscope Bracket	For 2-1/2 - 4 pipe.
K4582	Periscope Bracket with Spool	For 1-1/4 - 2-1/2 pipe.



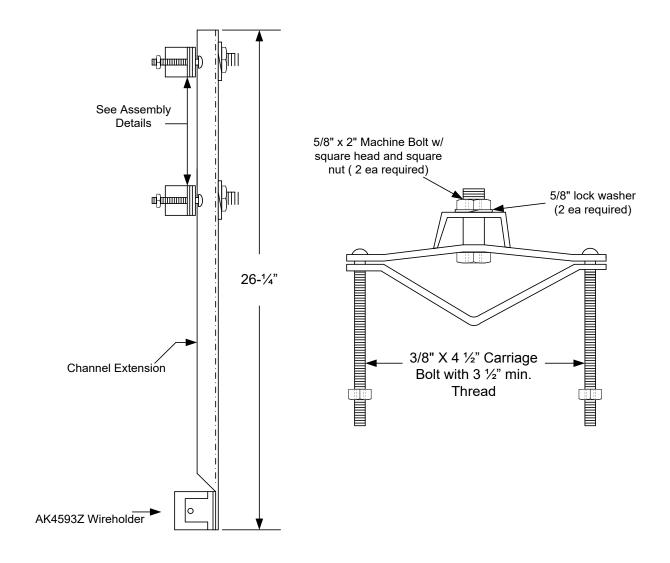
PERISCOPE BRACKET EXTENSION

POLE LINE HARDWARE - SECONDARY & SERVICE HARDWARE

Features

Kortick's periscope bracket extension is used to extend existing periscopes. The bracket will fit 3/4" to 3" periscopes and comes with the K4593Z wireholder. Hot dip galvanized per ASTM A153.

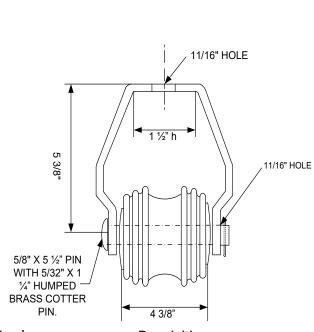
Part #: K8397



CLEVISES POLE LINE HARDWARE - SECONDARY & SERVICE HARDWARE

Features

Kortick insulated spool type clevises provide an economical, convenient, mechanically strong and electrically efficient fixture. Mounting bolts are extra and should be ordered separately. Operating voltages listed are based on average conditions and will serve only as a guide. Local requirements and climates must govern final selection of the clevis. Most clevises are available iron only or assembled with a porcelain or polymer spool upon request. They are available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.

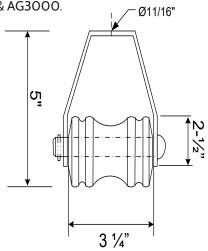


Part Number Descripition

K9254 Clevis, iron only

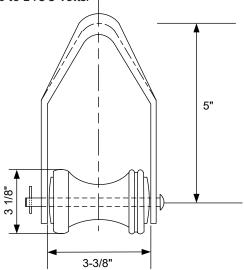
K9104 Clevis with 524 insulator spool

K9104 is recommended especially for 4000-volt primaries. The offset sides offer increased flash over resistance over the ordinary straight sides at the pin end. Used principally for corner or dead end attachmentsprovides excellent flashover values.



Part Number	Descripition
K9252	5" Extension clevis, iron only
K91∩2	5" Extension clavis with 526 insulator speed

K9102 provides excellent flash-over values. Reccomended for circuits up to 2400 volts.



Part Number	Descripition
K9259	Clevis, iron only
K9109	Clevis with 516 insulator spool

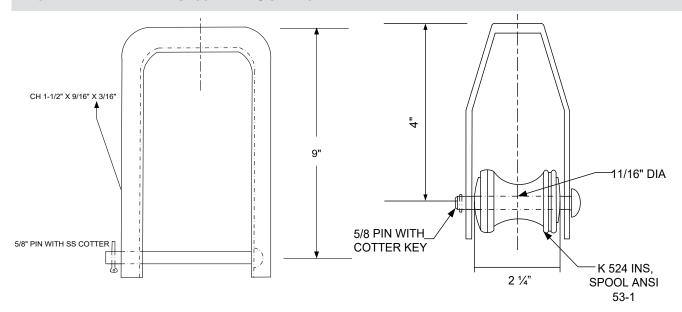


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CLEVISES

POLE LINE HARDWARE - SECONDARY & SERVICE HARDWARE



Part Number

Descripition

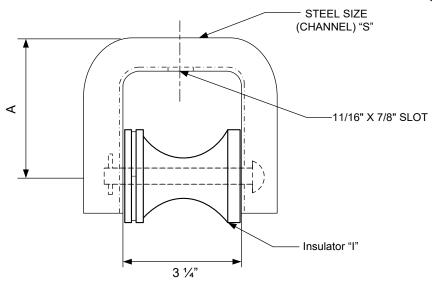
K9291

Cevis, iron only

K9087

Clevis with 516 spool

Part #: K9101-5/8 K9101-5/8 comes with a 524 spool and K9251 insulator. provides excellent flash-over values. Reccomended for circuits up to 750 volts.Provides sufficient conductor clearance for low voltage lines



K9107 & K9088 ASSEMBLY W K-516 IRON ONLY FOR K9257 & K9288

STOCK CODE No	Α	"S"	"["
K9088	4-3/4"	3/16" X 1" X 2"	K516*
K9107	5"	1/8" X ½" X 1 ½"	K516*
K9116	5"	1/8" X 1/3" X 1 1/3"	K522*

*INSULATOR AVAILABLE AS POLYMER OR PORCELAIN SPOOL.

K9107(P) Kortick Clevis is a standard secondary clevis, fits into 2" channel secondary brackets and clearance brackets for locking. Kortick clevis is standard at 5" clearance. K9088(P) clevis is the same as K9107 but heavier with 2" channel can mount on standard end or side of pole, facilitating low tension stringing

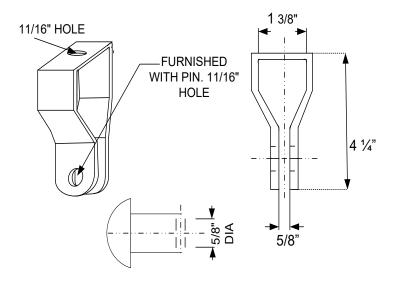
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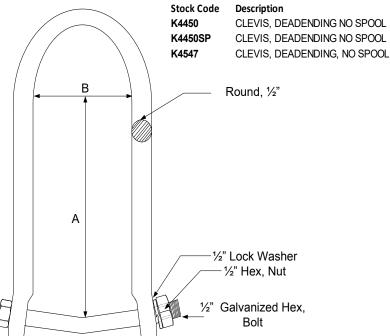
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CLEVISES POLE LINE HARDWARE - SECONDARY & SERVICE HARDWARE



The K4450 series dead ending clevis is used without a spool



1.478

Long Description

K4450 W/ 13/16 MTG HOLE

SAME AS K4450 EXCEPT HD STEEL, LESS PIN

Kortick Strain Clevis is an efficient and economical Dead Ending Unit conforming to the latest revision ANSI specification.

STOCK CODE No	Α	В
K9155	3"	2"
K9158	3 ½"	2 1/4"
K9164	4 ½"	2 ½"
K9165	5"	2 ½"

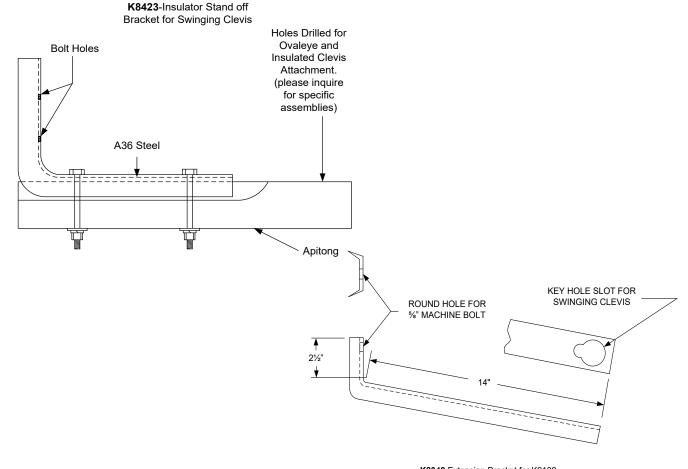


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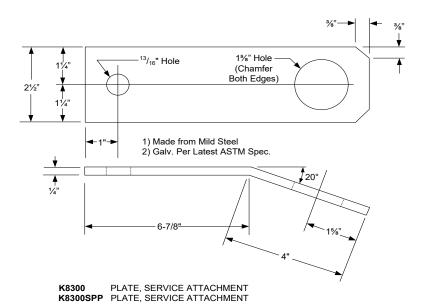
CLEVIS BRACKETS

POLE LINE HARDWARE - SECONDARY & SERVICE HARDWARE



K8348 Extension Bracket for K9109

This unit is used to provide added clearance from pole face where required. "Key-hole" slot will accommodate K9109, K9110, K9111, K9148, K9149, and K9259 Clevises.



To request Armorgalv® finish add "TDG" to the end of part number

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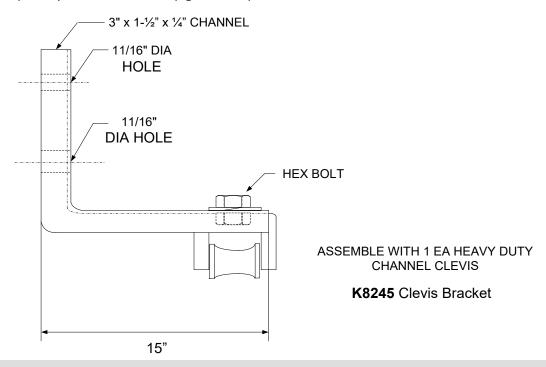


CLEVIS BRACKETS

POLE LINE HARDWARE - SECONDARY & SERVICE HARDWARE

Features

The clevis extension bracket can be used to add a clevis spool to a pole or cross arm. It is attached with two 5/8" bolts. Order spools seperately. It is available hot dip galvanized per ASTM A153.

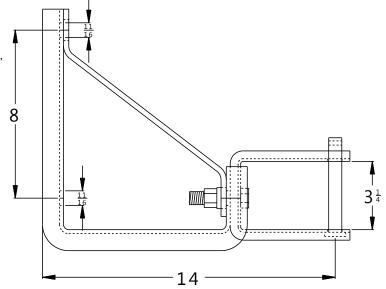


SINGLE SPOOL BRACKET

Features

The single spool clevis bracket can be used to add a clevis(K9257) to a pole or cross arm. It provides 14" clearance from the base. It is attached with two 5/8" bolts. It is available hot dip galvanized per ASTM A153. Order spools seperately.

Part #: K8242





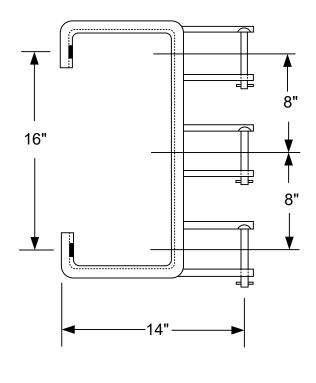
SECONDARY RACKS

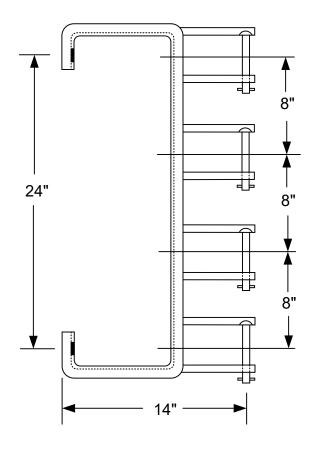
POLE LINE HARDWARE - SECONDARY & SERVICE HARDWARE

Features

The standard Kortick secondary racks (K4528, K4529) are made of heavy-duty channel and provide 14" of clearance with 8" of spacing. They are available in two, three, and four spool sizes, with the ability to add on an extra spool with the K8381. Available to be shipped with Spools if requested (K4528A, K4529A). Also available with different clearance and spacing distances upon request.

The K8348 provides additional clearance for K9109 clevis. K8423 Clevis Insulator standoff bracket creates standoff distance for various swinging clevis attachments. The K8245 comes with a spool type insulator assembled. Other clevis spacings and general variations are available; please inquire for more information. They are available hot dip galvanized per ASTM A153.





K4529

3-Wire, 8 inch second rack 3-Wire, 10 inch available K4528

4-Wire, 8 inch second rack 4-Wire, 10 inch available

The extension racks are made from 3/16" x 2" channel to provide strength for a 14" extension from the pole face to the insulator center line. Use K516 or K517 insulators.

POLE LINE HARDWARE - SECONDARY & SERVICE HARDWARE

Features The secondary rack extension bracket can be used to add an extra spool to Kotick's standard racks. The top portion of the extension mates with the lowest clevis on the rack to provide 8" spacing. The lower portion of the extension is bolted to the pole with a 5/8" bolt. It is available hot dip galvanized per ASTM A153. Mounting Slot

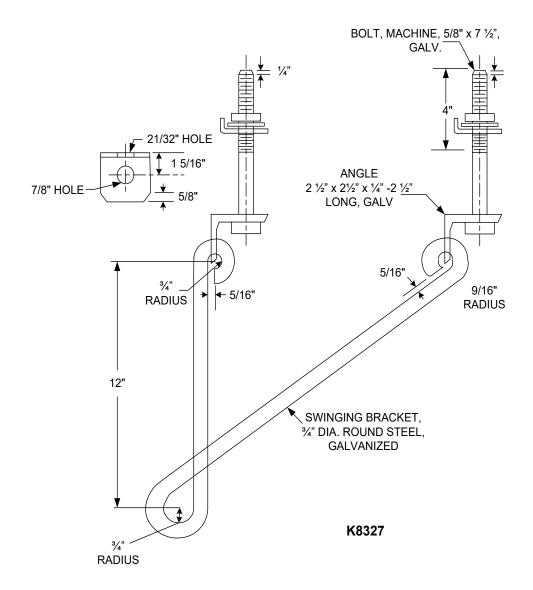
K8381 Extension Bracket for K4528, K4529 For use with Rack K4528, K4529, K8272, and K8273 to add one additional insulator (K516 not included).



SWINGING RACKS

POLE LINE HARDWARE - SECONDARY & SERVICE HARDWARE

Part #: K8327 Hot dip galvanized finish



KORTICK

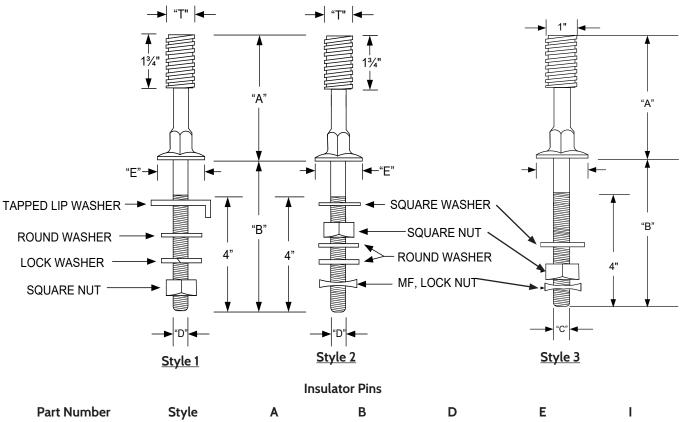
DISTRIBUTION INSULATOR PINS

POLE LINE HARDWARE - INSULATOR PINS & STUDS

Features

Kortick forges Insulator Pins from one piece, high carbon steel. The base distributes load and provides a firm seat on the cross arm. A square shoulder provides a wrench grip to assist in tightening the pin and when lining up the insulator groove. (K7100 series, K7770 series, K7790 series, K7794). Kortick pins meet latest revision ANSI specification.

- *Custom dimensions are available. Please inquire.
- **Pins available in both Nylon and Lead Thread. To specify lead remove the "Z" from the part number.



modator i mo								
Part Number	Style	Α	В	D	E	1		
K7791Z	1	5	6-1/2	5/8	2	1		
K7792Z	1	5	7-1/2	3/4	2	1		
K7792Z	1	7	7-1/2	3/4	2	1-3/8		
K7796Z	1	5	7-1/2	3/4	2-1/2	1		
K7793Z	1	7	7-1/2	3/4	2-1/2	1-3/8		
K7770Z	2	5	7-1/2	5/8	2	1		
K7105Z	3	5	6-1/2	5/8	2	1		
K7105Z	3	5	6-1/2	5/8	2	1		
K7106Z	3	5	7-1/2	5/8	2	1		
K1008Z	3	6	6-1/2	5/8	2	1		



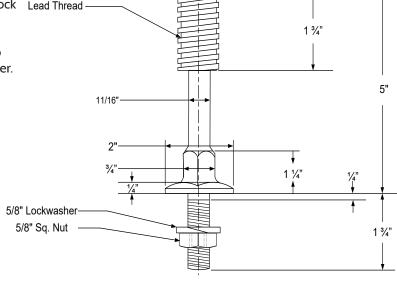
DISTRIBUTION INSULATOR PINS

POLE LINE HARDWARE - INSULATOR PINS & STUDS

Features

Short shank pins come with a square nut and a lock Lead Thread washer.

Pins available in both nylon and lead threads. To specify lead remove the "Z" from the part number.



Insulator Pins

Part Number	Style	Α	В	D	E	Т
K7122Z	Short Shank	5	1-3/4	5/8	2	1
K7795Z	Short Shank	7	1-1/2	3/4	2	1
K7794Z	Short Shank	7	1-1/2	3/4	2	1-3/8

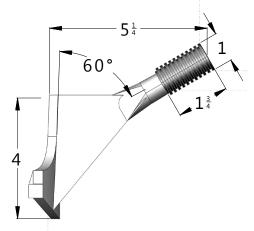
INSULATOR CORNER PIN

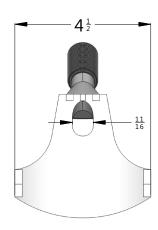
Features

Kortick's angled corner pin provides a 60 degree mounting angle. It is usually mounted with 5/8 x 7 MA bolt throught the crossarm (Order seperately). Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.

Pins available with both nylon and lead threads.

K7140TDG - TDG finish with nylon threads **K7140** - HD finish with lead threads





To request Armorgalv® finish add "TDG" to the end of part number

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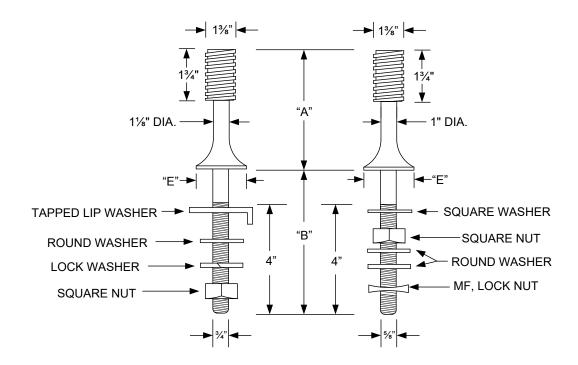
POLE LINE HARDWARE - INSULATOR PINS & STUDS

Features

Kortick forges Insulator Pins from one piece, high carbon steel. The large diameter base distributes strain and provides a firm seat on the cross arm. Available with nylon or lead threads. To specify lead remove the "Z" from the part number.

The K7774-K7784, K7631 transmission series has a tapered body for strength. Kortick pins meet latest revision ANSI specification.

*Custom dimensions are available. Please inquire.



Insulator Pins								
Part Number	Style	Α	В	D	E	Т		
K7774Z	1	13	8-1/2	3/4	3-1/2	1-3/8		
K7770Z	2	5	7-1/2	5/8	2	1		
K7774Z	2	7	7-1/2	5/8	3	1-3/8		
K7774-8 1/2Z	2	7	8-1/2	5/8	3	1-3/8		

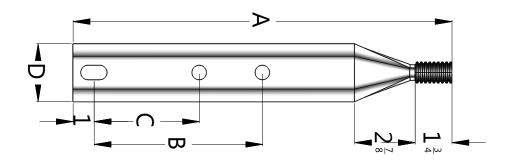


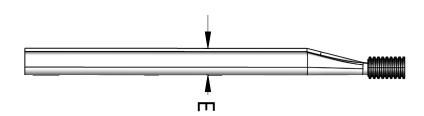
POLE TOP PINS

POLE LINE HARDWARE - INSULATOR PINS & STUDS

Features

The Kortick Pole top Pin series (K7788 & K8124) are formed from a single pipe for maximum strength. Pole top pins are also available in channel, (K8076, K8079) or angle (K8107).





	DIMENSIONS IN INCHES						
sтоск	Overall		Moun1	ing Ho Spa		Approx. Shipping	
CODE NO.	Length A	Size Steel	Number	В	С	Weight Pounds per 100 Pieces	
Р	RESSEC	STEEL CHA	NNEL, 1	INCH L	EAD T	HREAD	
K8076	15	1 7/8 x 1 5/16	2	5	-	284	
K8079	18	1 7/8 x 1 5/16	3	8	5	340	
K8083	24	1 7/8 x 1 5/8	3	8	6	620	
PRI	ESSED S	STEEL CHAN	NEL, 1 3/	8 INCH	LEAD	THREAD	
K8086	20	1 7/8 x 1 1/2	2	8	-	453	
K8087	24	1 7/8 x 1 5/8	2	8	-	680	
	STRAIG	HT CHANNE	L, 1 3/8 IN	ICH LE	AD TH	READ	
K8105	24	1 3/4 X 5/8 X 1/8	2	8	-	720	
	STR	AIGHT ANGL	E, 1 INCH	LEAD	THRE	AD	
K8106	18	2 X 2 X 3/16	2	8	-	380	
K8107	24	2 X 2 X 3/16	2	8	-	550	
K8108	30	2 X 2 X 3/16	2	8	-	750	
	EXTRA S	STRONG PIP	E, 1-3/8 IN	ICH LE	AD TH	IREAD	
K8122	24	1-1/2	2	8	-	820	
K8123	26	1-1/2	2	8	-	960	
K8124	28	1-1/2	2	8	-	1035	
K7788	22	1-1/2		CUSTO	OM DIME	ENSIONS	

To request Armorgalv® finish add "TDG" to the end of the part number

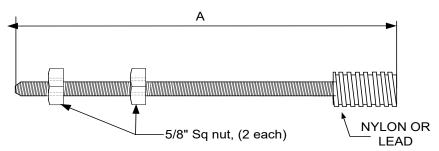


INSULATOR STANDOFF BRACKETS

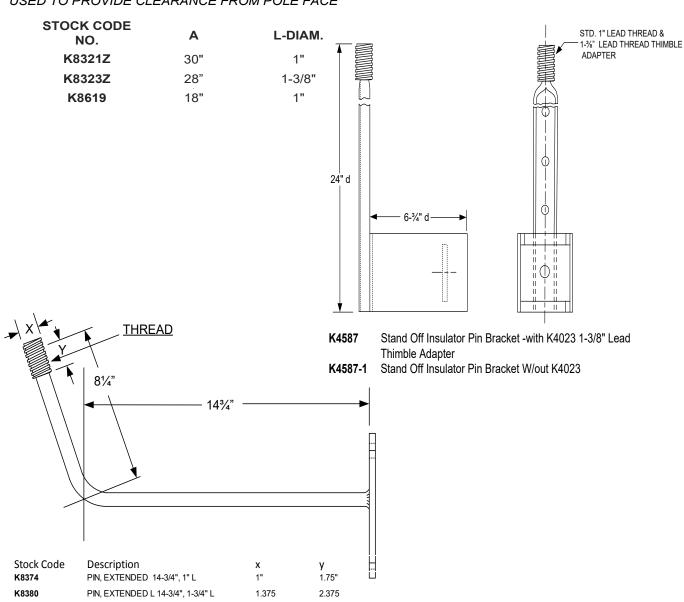
POLE LINE HARDWARE - INSULATOR PINS & STUDS

Features

The Kortick insulator standoff brackets are available perpendicular, parallel or at a 45 degree angle from the pole.



USED TO PROVIDE CLEARANCE FROM POLE FACE





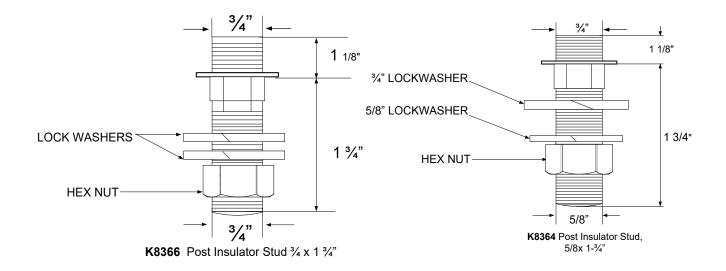
2230 Davis Court Hayward, CA 94545 PH. (510) 856-3600 EM. sales@kortick.com www.KORTICK.com

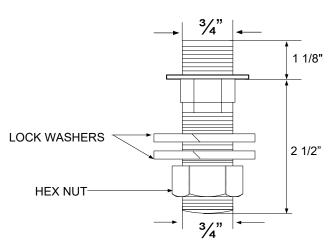
INSULATOR STUDS

POLE LINE HARDWARE - INSULATOR PINS & STUDS

Features

Kortick insulator studs are used to mount post insulators. Please refer to the drawings for the varying shank diameters and lengths. Studs fabricated from A36 carbon steel, hot dipped galvanized, and threaded to ASTM specifications. All Kortick stud types are available in custom sizes and assemblies. Please inquire for more details and custom assemblies.





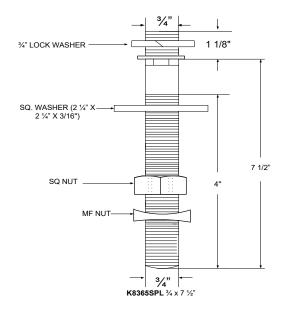
K8366SPL Post Insulator Stud 3/4 x 2 1/2"

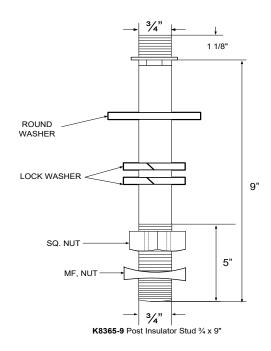
To request Armorgalv® finish add "TDG" to the end of the part number

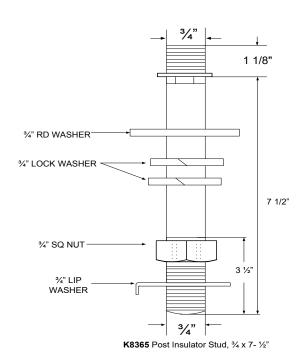


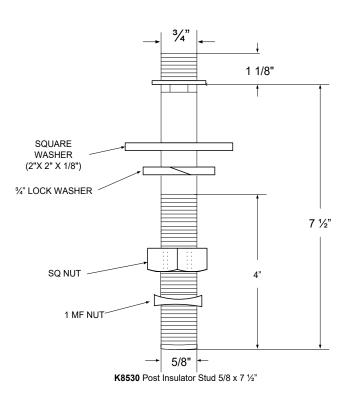
INSULATOR STUDS

POLE LINE HARDWARE - INSULATOR PINS & STUDS











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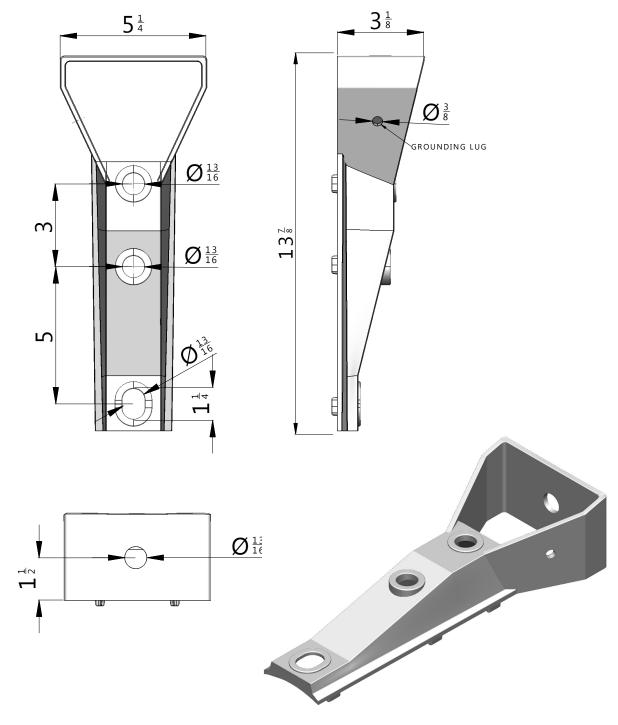
POST INSULATOR BRACKETS

POLE LINE HARDWARE - INSULATOR BRACKETS

Features

Vertical post insulator bracket for 35kv Vertical Post insulator and K8257-69 for 69kv vertical post insulator.

K8257TDG Thermal diffusion galvanized finish
K8257 Hot-dip galvanized finish



To request Armorgalv® finish add "TDG" to the end of part number

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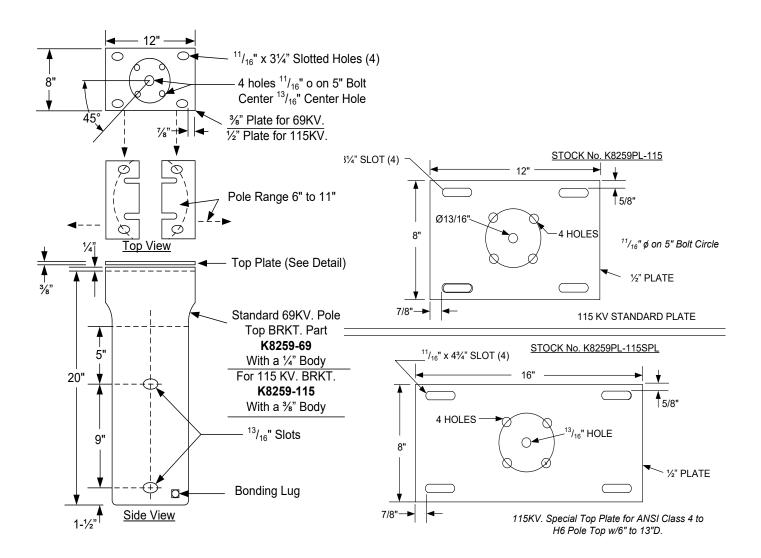


INSULATOR POLE TOP BRACKETS

POLE LINE HARDWARE - INSULATOR BRACKETS

Features

K8259 series (for 69kv and 115kv applications) provides strength and flexible design. A complete pole top Bracket consists of a top plate and a mounting bracket for a 69kv or 115kv insulator. The top plate and mounting bracket may be made up in any special combination of the two parts. The standard 69kv includes a 69kv bracket body and a pole top plate (K8259PL-69), plus assembly bolts and bonding material per the drawing. The standard 115kv part #K8259-115 includes the 115kv bracket body and pole top plate part # K825PL-115, plus assembly bolts and bonding material per the drawing. Special 115kv top plate part # K8259PL-115SPL is available for a larger sized pole top up to a class H6 pole, per the drawing. They are available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



To request Armorgalv® finish add "TDG" to the end of the part number

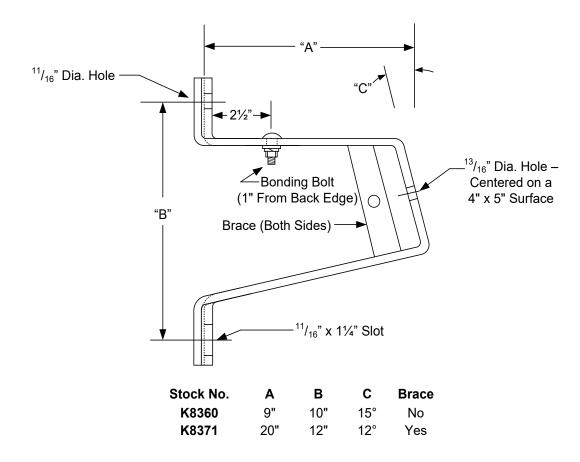


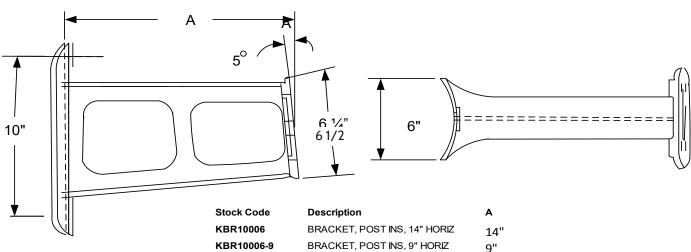
HORIZONTAL INSULATOR BRACKETS

POLE LINE HARDWARE - INSULATOR BRACKETS

Features

The K8360/K8371 and KBR10006 are for use with line post insulators in distribution or transmission to increase conductor clearance or give added climbing space. Pole end of bracket curved to fit a wood pole. Custom variations are available; please inquire for further detail. The KBR10006 is designed for 69kv lines. Available hot dip galvanized.



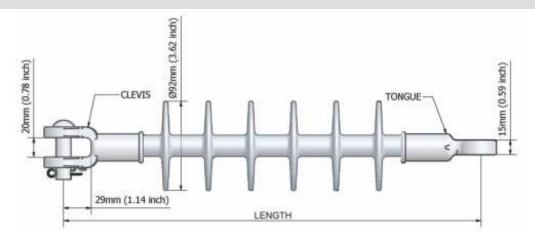


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POLE LINE HARDWARE - INSULATOR BRACKETS



Certified test reports meets and exceeds Mechanical and Electrical ratings of ANSI C29.13-2000

	Unit	DS15	DS28	DS35
DIMENSIONS				
Sectional Length	mm (")	330 (12.99)	430 (16.93)	485 (19.08)
Minimum Leakage Distance	mm (")	400 (15.75)	600 (23.62)	730 (28.74)
Minimum Arcing Distance	mm (")	210 (8.26)	280 (11.02)	350 (13.78)
ELECTRICAL RATINGS				
Low-Frequency Try	kV(rms)	90	125	145
Flashover Wet	kV(rms)	65	100	130
Positive Critical Impulse Flashover	kV(peak)	140	200	260
Radio-Influence Voltage				
Minimum Test Voltage	kV rms	10	20	25
Maximum Radio Influence Voltage at 1000 kHz	μV	<5	<5	<10
MECHANICAL RATINGS				
Minimum SML	kN (lb)	70(15.737)	70(15.737)	70(15.737)
Minimum Torsional Load	N-m (ft-lb)	50 (37)	50 (37)	50 (37)
Net Weight (Approximate)	kg (lb)	1 (2.2)	1.1 (2.4)	1.2 (2.6)
END FITTING OPTIONS	Material	Part Number	Part Number	Part Number
CLEVIS & TONGUE	Forged Steel	KASA15CTSCA	KASA28CTSCA	KASA35CTSCA
BALL & SOCKET	Forged Steel	KASA15SBSCA	KASA28SBSCA	KASA35SBSCA
EYE & EYE	Forged Steel	KASA15EESCA	KASA28EESCA	KASA35EESCA
Y (WYE) & EYE	Forged Steel	KASA15YESCA	KASA28YESCA	KASA35YESCA
Standard Package (Nos)		16	16	16

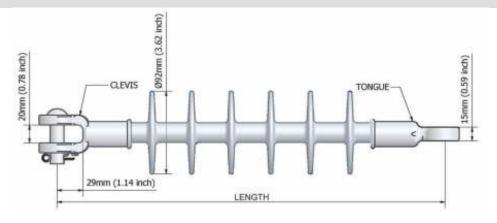
Key to part number in KASAxxxxxCA; "K" stands for Kortick "C" stands for CAN/CSA & "A" stands for ANSI



SML (Specified Mechanical Load) — SML on Light weight insulator were subject to a tensile load that is increased rapidly but smoothly from zero to 75% of 70 kN and then gradually to 70 kN over a period of 30 to 90 sec RTL (Routine Test Load) - 50 % of SML required Standard Series Light weight insulator comes with galvanized forged steel fittings that are rated for SML 70+ kN depending on the type of end fitting combination, Split pin is made from Stainless Steel; Aluminium end fittings are available upon request. Kortick ArmorGalv® option available on request. 46kV & 69kV Voltage Classes are available on request. 4.

DEAD END/ SUSPENSION COMPOSITE INSULATORS

POLE LINE HARDWARE - INSULATOR BRACKETS



Certified test reports meets and exceeds Mechanical and Electrical ratings of ANSI C29.13-2000

	Unit	DS15	DS28	DS35
DIMENSIONS				
Sectional Length	mm (")	330 (12.99)	430 (16.93)	485 (19.08)
Minimum Leakage Distance	mm (")	400 (15.75)	600 (23.62)	730 (28.74)
Minimum Arcing Distance	mm (")	210 (8.26)	280 (11.02)	350 (13.78)
ELECTRICAL RATINGS				
Low-Frequency — Dry	kV(rms)	90	125	145
Flashover Wet	kV(rms)	65	100	130
Positive Critical Impulse Flashover	kV(peak)	140	200	260
Radio-Influence Voltage				
Minimum Test Voltage	kV rms	10	20	25
Maximum Radio Influence Voltage at 1000 kHz	μV	<5	<5	<10
MECHANICAL RATINGS				
Minimum SML	kN (lb)	100(22,480)	100(22,480)	100(22,480)
Minimum Torsional Load	N-m (ft-lb)	60 (37)	50 (37)	50 (37)
Net Weight (Approximate)	kg (lb)	1 (2.2)	1.1 (2.4)	1.2 (2.6)
XL SERIES END FITTING OPTIONS	Material	Part Number	Part Number	Part Number
CLEVIS & TONGUE	Forged Steel	KASA15CTSCA	KASA28CTSCA	KASA35CTSCA
BALL & SOCKET	Forged Steel	KASA15SBSCA	KASA28SBSCA	KASA35SBSCA
EYE & EYE	Forged Steel	KASA15EESCA	KASA28EESCA	KASA35EESCA
Y (WYE) & EYE	Forged Steel	KASA15YESCA	KASA28YESCA	KASA35YESCA
Standard Package (Nos)		16	16	16

SML (Specified Mechanical Load) – SML on Ligh weight insulator were subject to a tensile load that is increased rapidly but smoothly from zero to 75% of 70 kN and then gradually to 70 kN over a period of 30 to 90 sec

2. RTL (Routine Test Load) - 50 % of SML required

4. 46kV & 69kV Voltage Classes are available on request.

^{5.} Key to part number in KASAxxxxxCA; "K" Stands for Kortick "C" stands for CAN/CSA & "A" stands for ANSI

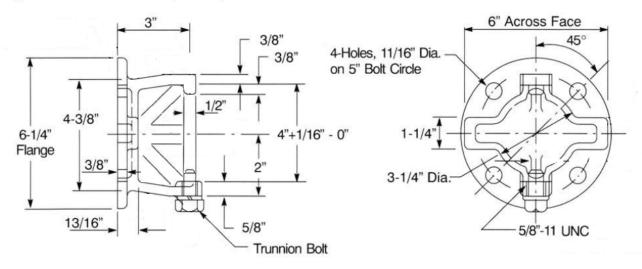


^{3.} XL Series Ligh weight insulator comes with galvanized forged steel fittings that are rated for SML 70+ kN depending on the type of end fitting combination, Split pin is made from Stainless Steel; Aluminium end fittings are available upon request. Kortick ArmorGalv® option available on request.

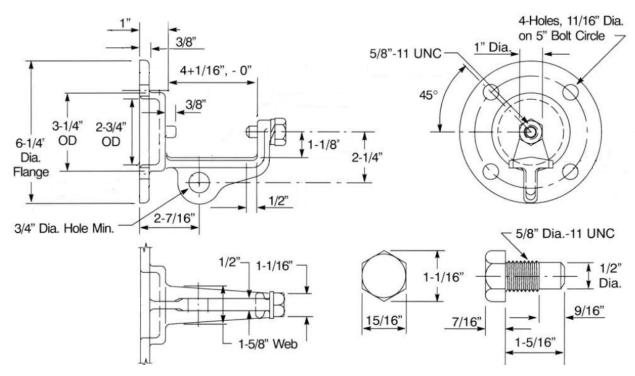
Features

Conductor clamps are used for mounting ceramic line post insulators. They are available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.

KM182386 Vertical



KM182387 Horizontal



*Drawing Source: PG&E 2016 Specs

To request Armorgalv® finish add "TDG" to the end of the part number

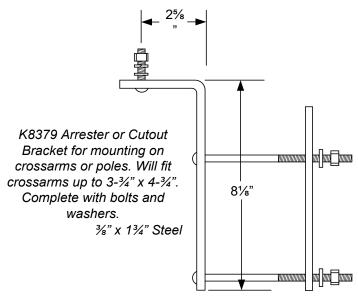


CUTOUT & ARRESTOR BRACKETS

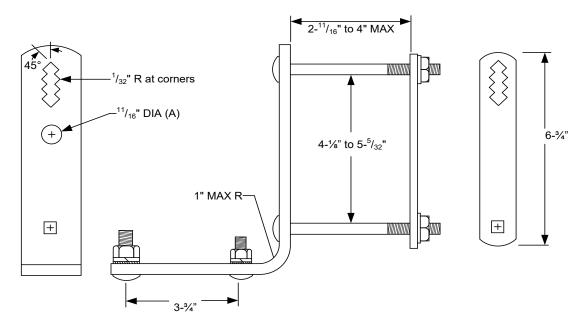
POLE LINE HARDWARE - BRACKETS

Features

Kortick Cutout Mounting Brackets and Cutout/Arrester Combo Brackets are customizable to varying hardware assemblies, strength requirements, and cross arm dimensions, please inquire for further information. K8440, K8377 and K8379 are the Kortick Standard designs. The K8363 mounts a cutout, arrestor, or termination while providing 20" of clearance from pole. The K8361-1 mounts three cutouts, arresters, or terminations. (Adapter plates available to mount three each-cutouts and arresters). They are available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



K8379 BRACKET, CUTOUT/ARRESTER MTG



BRACKET, CUTOUT MOUNTING K8440

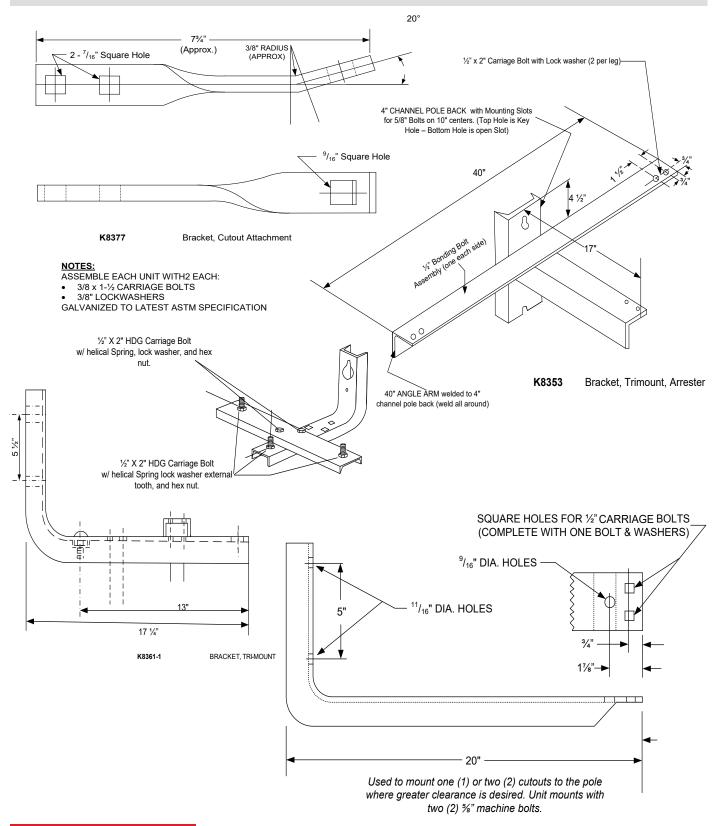
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POLE LINE HARDWARE - BRACKETS



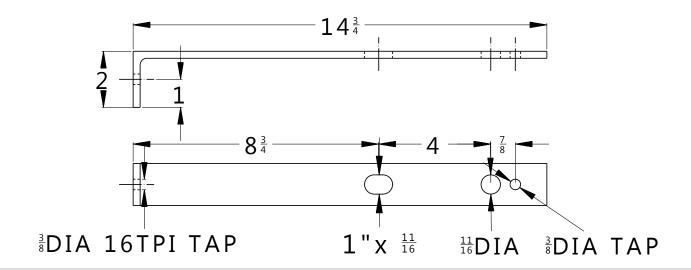


MANUFACTURING COMPANY K8363 BRACKET, CUTOUT MOUNTING POLE LINE HARDWARE DROP PRESS-UPSET FORGINGS
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www.KORTICK.com

END ARM CLEARANCE BRACKETS

POLE LINE HARDWARE - BRACKETS

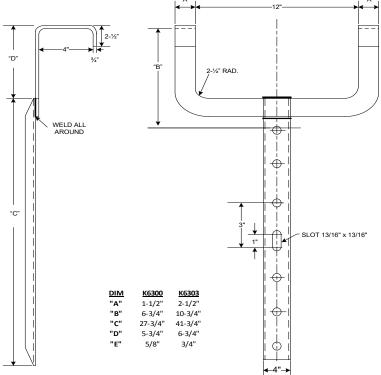
K8555 Hot-dip galvanized finishK8555TDG Thermal-diffusion galvanized finish



TRANSFORMER BRACKETS

Features

Kortick Transformer Brackets conform to NEMA standard. K8350 and K8351 Are open delta brackets for two transformers. KBR10120 three phase transformer bracket's center pole gain is made of heavy duty channel to improve strength. K6300 and K6303 are single transformer hook brackets. Available hot dip galvanized per ASTM A153.



K6303

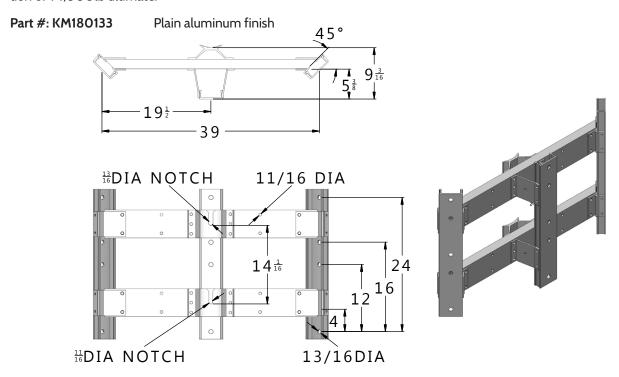
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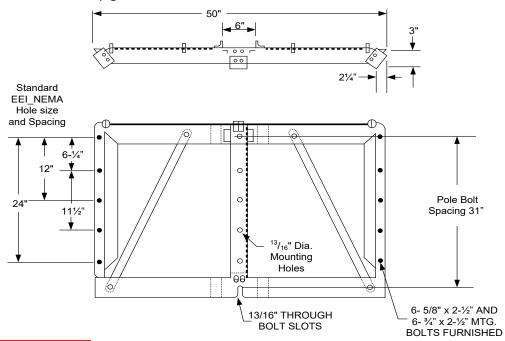


Features

Kortick transformer mounting bracket has positions for one, two or three transformers. KM180133 is fabricated out of aluminum. KBR10120 is fabricated from A36 steel and galvanized; with an ultimate load rating of 4000 lbs per position or 1~1,000lb ultimate.







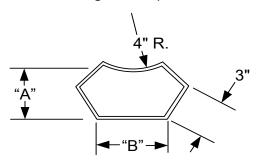


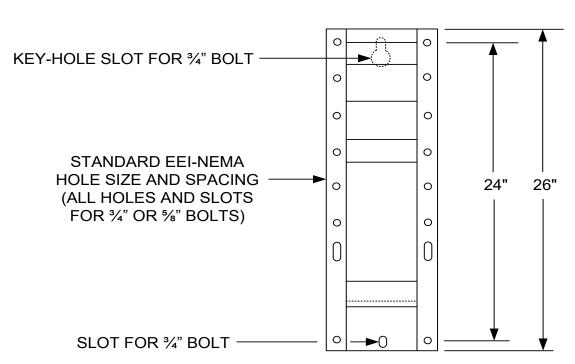
TRANSFORMER BRACKET, TWO MOUNTING

POLE LINE HARDWARE - BRACKETS

Features

Kortick transformer mounting bracket has positions for one or two tranformers. It is fabricated from A36 steel and available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000





Stock No.	"A"	"B"
K8350	4"	5"
K8351	6-1/4"	8-1/2"

The transformer bracket is attached directly to the pole with 3/4" bolts. Two transformers can be mounted on the unit in "Open Delta" or "Parallel".

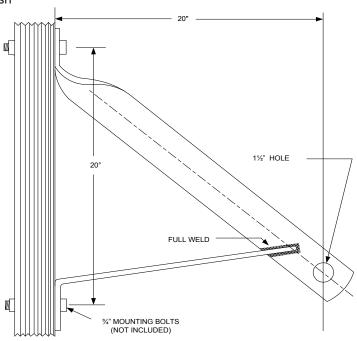
To request Armorgalv® finish add "TDG" to the end of the part number



VERTICAL EXTENSION BRACKETS

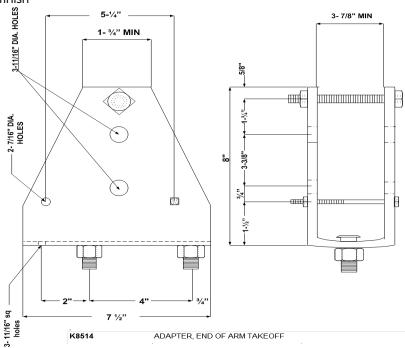
POLE LINE HARDWARE - BRACKETS

K8388 Hot dip galvanized finish



END ARM TAKEOFF BRACKET

K8514 Hot dip galvanized finish





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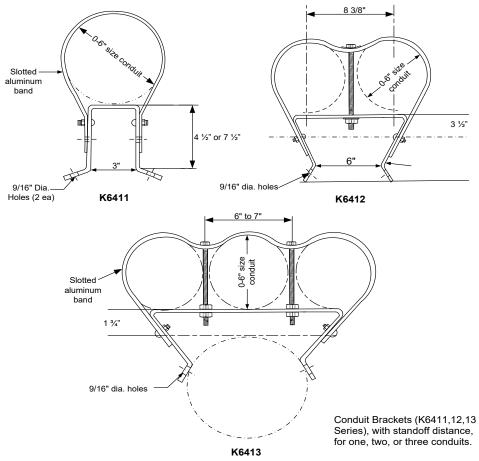
CONDUIT STANDOFF BRACKETS

POLE LINE HARDWARE - BRACKETS

Features

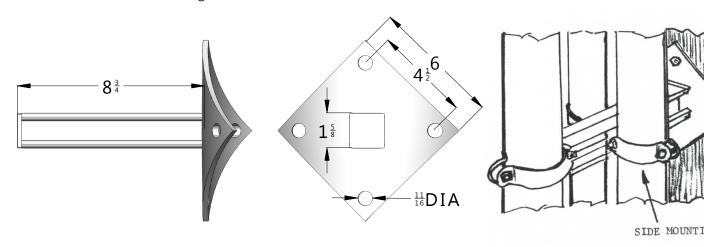
Pictured above-K64 series with flat bar and aluminum design.

Pictured below-KB1965 series with strut. Please inquire for length, part numbers, and design specifics.



KB1965-A12-1/2 12-1/2" length

KB1965-A8-1/2 8-1/2" length (show below)



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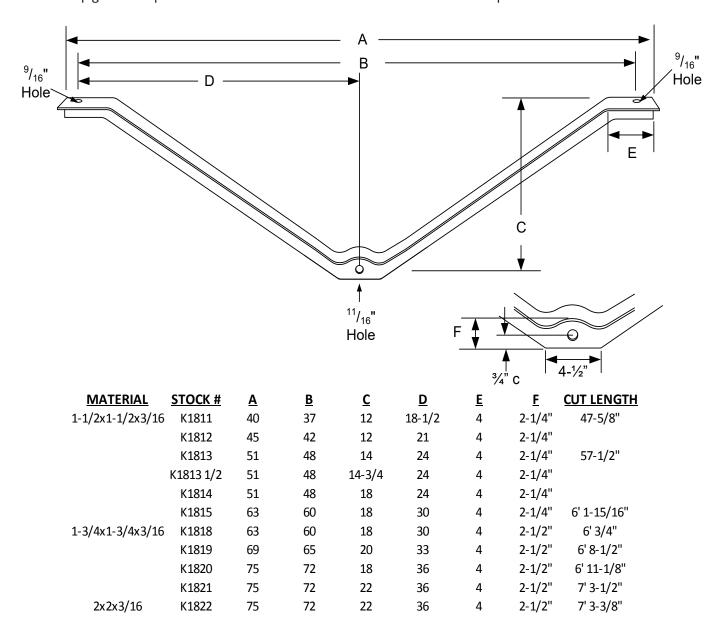


V STYLE CROSSARM BRACES

POLE LINE HARDWARE - BRACES

Features

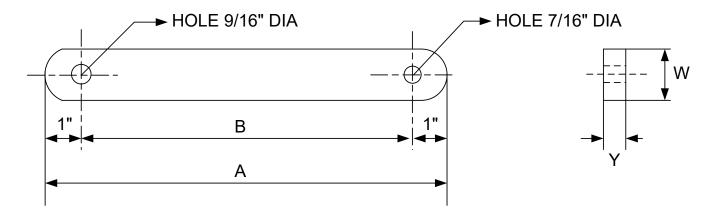
Kortick "V" cross arm braces are installed where conditions require more then flat brace construction. Braces are fastened to the pole with a 5/8-inch cross arm bolts, and to the cross arm with two ½-inch cross arm bolts or lag screws. Mounting Bolts and Lags are extra and should be ordered separately. Hot formed from one piece of steel angle iron, and hot dip galvanized per ASTM 123. Braces conform with current revision of ANSI specs.



FLAT BRACES POLE LINE HARDWARE - BRACES

Features

Kortick flat cross arm braces are designed to support wood cross arms carrying tangent loads. Rounded corners on the brace ends prevent damage and reduce the possibility of injury. Minimum tensile strength at the bolt holes is 7,000 pounds. Hole centers are one inch from end of brace. Braces Manufactured to latest revision ANSI specification. Also available with custom hole sizes, Kortick is equipped to manufacture any variation on this spec as needed. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



STOCK NO.		DIMENSIONS IN INCHES		
1 ¼" (W) X ¼" (Y) BRACE STOCK	1 7/32" (W) X 7/32" (Y) BRACE STOCK	A	В	
K1420	K1720	20	18	
K1422	K1722	22	20	
K1424	K1724	24	22	
K1426	K1726	26	24	
K1428	K1728	28	26	
K1430	K1730	30	28	
K1432	-	32	30	
-	K1734	34	32	
K1436	-	36	34	
K1412	-	14	12	
*K1436SPL	-	36	34	

*SPECIAL CROSS ARM BRACE WITH 9/16" DIA HOLES ON EACH END

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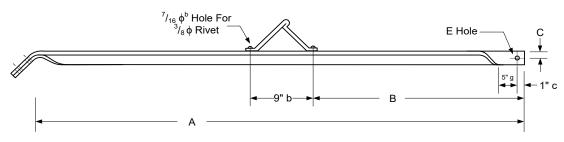
ALLEY CROSS ARM BRACES

POLE LINE HARDWARE - BRACES

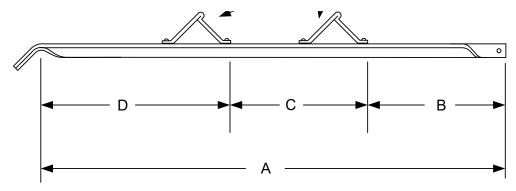
Features

When a cross arm can be mounted on only one side of the pole, an alley cross arm brace may be used. Used correctly it will ensure the correct alignment of the power and distribution lines. K1950 series Kortick alley arm braces are hot formed with equal leg angle. Care is taken at the bends to maintain a gap in the fold, allowing for proper galvanizing and corrosion prevention. The brace and step are galvanized separately, then riveted with high strength aluminum alloy. Separately galvanizing step and brace prevents acid bleeding and future corrosion concerns. The step has an exaggerated lip at the end to create a stronger, more reliable foothold. Kortick alley arm braces conform to latest revision ANSI specification. Recommended assembly for alley arm braces at a 45 degree angle.

K8300 series is similar to the K1950 series in construction but fabricated using heavy duty $2\,1/2x2\,1/2$ angle. The K8309 has a second step. K8511 angle alley arm brace is hot formed eliminating the need for a cold bend cut seen elsewhere in the industry. It is used for heavy-duty applications.



	All Dimensions in Inches									
Stock		Step Stock		В		_				
No. K1951	Angle 1½x1½x ³ / ₁₆		A 60e	B 30d	C 3⁄4C	5⁄8C	⁹ / ₁₆ b			
	$\frac{1/2x1/2x}{1/2x}^{3}/_{16}$		72e	30d	1	5⁄8C	⁹ / ₁₆ b			
		$^{3}/_{16}$ x1 $^{1}/_{4}$	84e	30d	3/4C	5⁄8C	⁹ / ₁₆ b			
K1953	13/4x13/4x ³ / ₁₆	$^{3}/_{16}$ x1 $^{1}/_{2}$	60e	30d	7⁄8C	³∕₄C	⁹ / ₁₆ b			
K1954	$1\frac{3}{4}x1\frac{3}{4}x^{3}/_{16}$		84e	30d	7⁄8C	³∕₄C	¹¹ / ₁₆ b			
K1955	2x2x1/4	$^{3}/_{16}$ x1 $^{3}/_{4}$	120e	50d	1c	7∕8C	¹¹ / ₁₆ b			



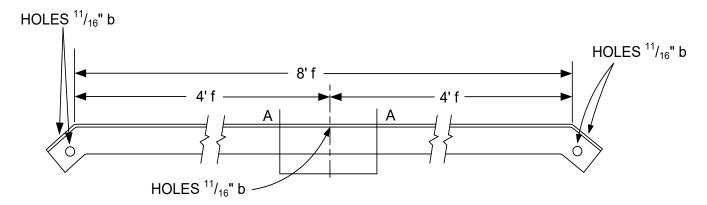
 $\frac{3}{16}$ " x 2- $\frac{1}{2}$ " x 2- $\frac{1}{2}$ " Alley Arm Braces (Similar To type B Alley Arm Brace)

Stock No.	Α	В	С	D	# Steps
K8308	7'0"	3'1"	0	3'11"	1
K8309	10'0"	3'3"	2'3"	4'6"	2



ALLEY CROSS ARM BRACES

POLE LINE HARDWARE - BRACES

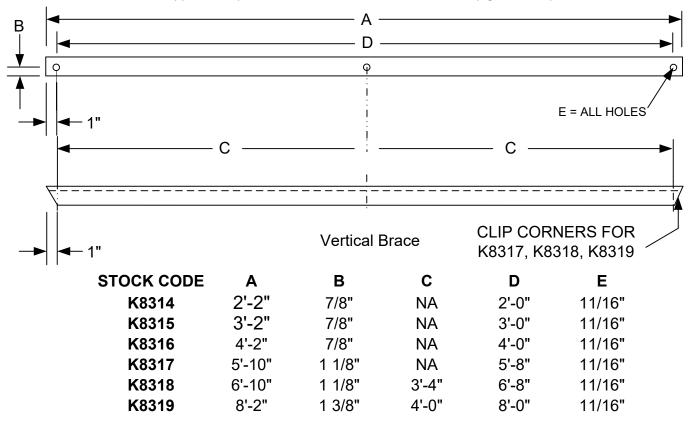


K8511 Alley Cross Arm Brace 8' Heavy Duty

VERTICAL BRACES

Features

Vertical braces are used to support multiple cross arms, one above the other. Hot dip galvanized per ASTM A153.



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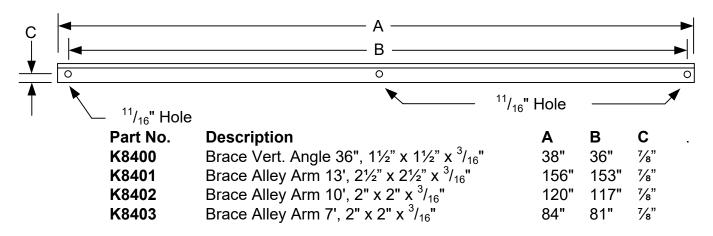


VERTICAL BRACES

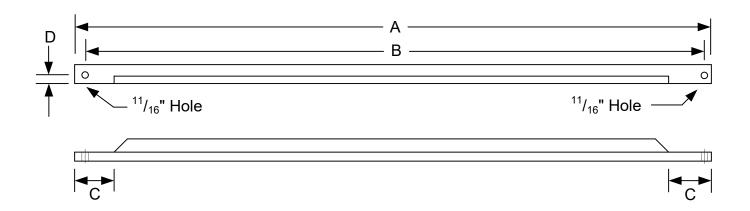
POLE LINE HARDWARE - BRACES

Features

Vertical braces are used to support multiple cross arms, one above the other. Hot dip galvanized per ASTM A153.



Items Made of Steel
Hot Dip Galvanized After Fabrication
ASTM A123 / A153



Part No.	Description	Α	В	C	D
K8406	Brace Special Angle 6', 2" x 2" x $^3/_{16}$ "	74"	72"	41/2"	7/8"
K8407	Brace Special Angle 4', 1¾" x 1¾" x ³ / ₁₆ "	50"	48"	41/2"	3/4"

Items Made of Steel
Hot Dip Galvanized After Fabrication
ASTM A123 / A153



HARDWOOD CROSSARM BRACES

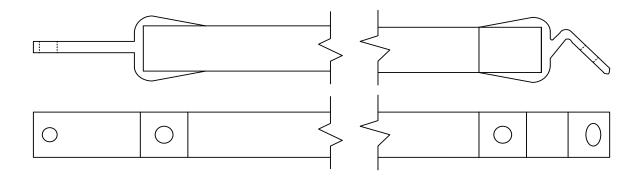
POLE LINE HARDWARE - BRACES

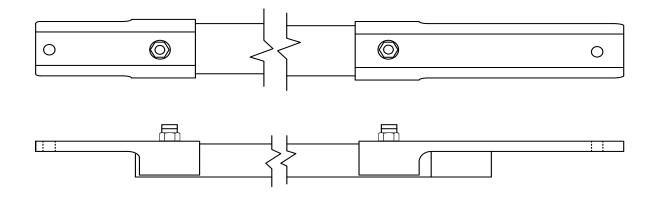
Features

Hardwood crossarm braces are made of untreated hardwood per ANSI 05.6. Strongest cross sectional strength wood bracket. For more information please visit page 99 of the catalog. *Custom dimensions and designs are available. Please inquire for part numbers.

Hardwood Crossarm Braces

Span	Drop	Length	
38	18	26	
60	18	35	

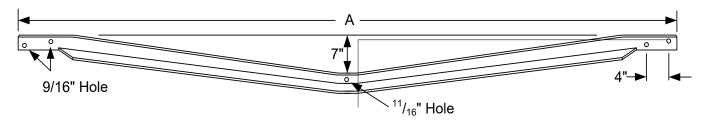




BACK BRACES POLE LINE HARDWARE - BRACES

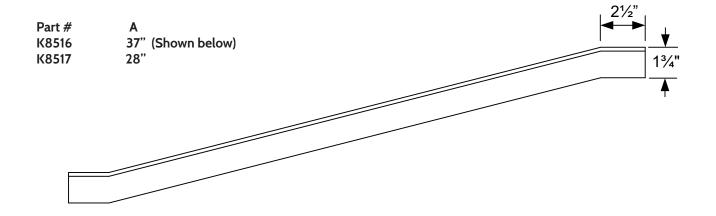
Features

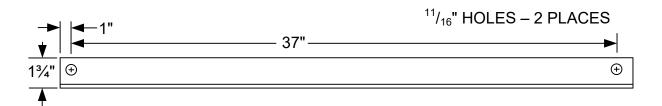
Kortick back braces are installed to reinforce wood crossarms at terminal poles, on corner construction, and where an angle in the line is necessary. Hot dip galvanized per ASTM A153.



Back Braces

Part Number	Length (A)			
1-1/2 x 1-1/2 x 3/16 Angle				
K1984	48"			
K1985	60"			
K1986	72"			
1-3/4 x 1-3/4 x 3/16 Angle				
K1987	94"			
K1988	109"			





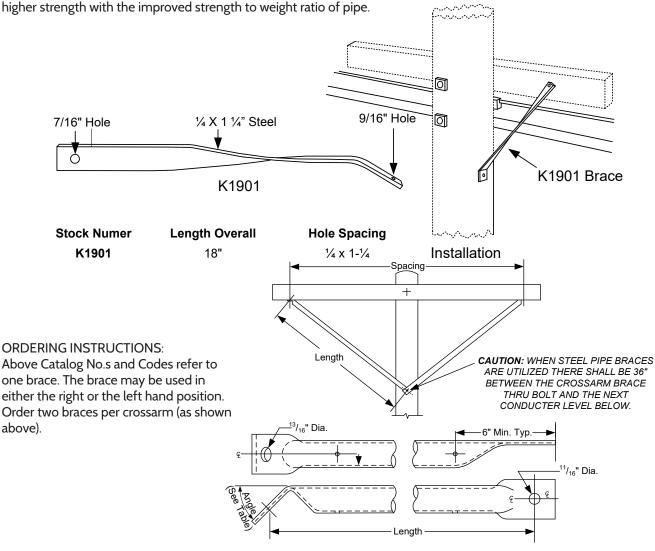


GUARD ARM & ROUND BRACES

POLE LINE HARDWARE - BRACES

Features

Kortick guard arm braces are attached to one side of the guard arm for additional support at those points on the pole where cable or drop wire is suspended. Twists are hot fabricated and hot dip galvanized per latest revision ASTM Spec A153. Mounting bolts and lag screws are extra and should be ordered separately. Round cross arm braces (K8226 series) for raptor protection. Used in place of wood transmission cross arm braces when acceptable. Applications requiring higher strength with the improved strength to weight ratio of pipe.



STOCK NUMBER	LENGTH (Inch)	SPACING (Inch)	ANGLE (Degrees)
K8226	54	84	38½
K8227	60	96	36
K8228	66	108	36
K8229	84	132	38½

NOTE:

To Provide raptor protection, steel crossarm braces should not be used on structures located within Bureau of Land Management areas.

ORDERING INSTRUCTIONS: Above Catalog Nos. and Codes refer to one brace. The brace may be used in either the right or the left hand position. Order two braces per crossarm (as shown above)

MANUFACTURING COMPANY POLE LINE HARDWARE DROP PRESS-UPSET FORGINGS

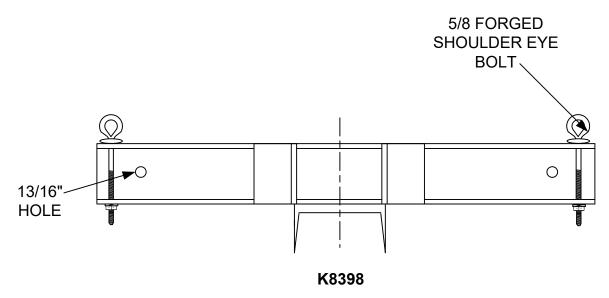
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STEEL CROSSARMS

Features

Dead-end steel cross arm are used as a single or double dead ending arms (please order additional eye nuts for double dead end use). Holes punched for pin type insulators or post type insulators are provided to mount at one or both ends. Cross Arm also available in other lengths and strengths upon request. Hot dip galvanized per ASTM A153.



Crossarm made with 4"x 5/4lb channel and 5"

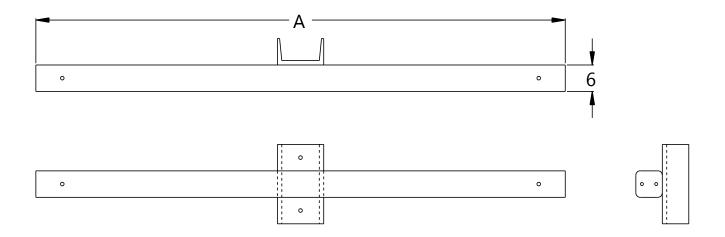
channel for the gain. Arm and gain are welded together with gussets each side to add strength and rigidity. Assembled with 5/8" Eye Bolts for dead ending. Mount to the pole with 5/8" Cross arm Bolts. Can be used as a 'double dead end' by adding 5/8" Oval eye Nuts to the back of each Eye Bolt.

HEAVY STEEL CROSSARMS

POLE LINE HARDWARE - CROSSARMS & GAINS

Features

Dead-end steel cross arm are made out of heavy steel tubing. They are used as a single or double dead ending arms (please order additional eye nuts for double dead end use). Holes punched for pin type insulators or post type insulators are provided to mount at one or both ends. Hot dip galvanized per ASTM A153. Cross Arm also available in other lengths and strengths upon request.

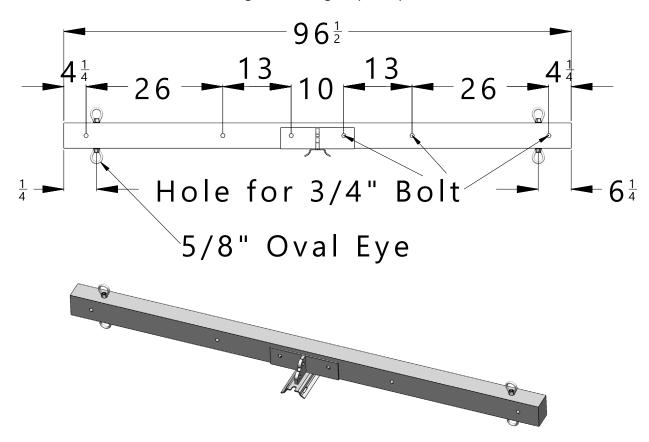


Crossarms			
Part Number	Length	Description	
KM150020	7'		
KXREDDSTL10ARM	10'	Heavy steel tube	
KM150024	11'		
KM150025	14'		
KM154O92	7'	Deadend	
KM154105	11'	Deadend	
KM154566	14'	Deadend	

POLE LINE HARDWARE - CROSSARMS & GAINS

Features

Dead-end fiberglass cross arm are used as a single or double dead ending arms (please order additional eye nuts for double dead end use). Fiberglass crossarms are significantly lighter then wood crossarms and provide greater strength. Fiberglass crossarm surfaces are thermally bonded to prevent weathering, add UV protection, and are impervious to insects. Cross Arm also available in other lengths and strengths upon request.



Crossarms

Part Number	Length	Ultimate vertical load per side	Notes
KM180068	8'	5,400	Heavy duty
KM180069	9'	4,600	Heavy duty
Please inquire	10'	4,600	Heavy duty
Please inquire	12'	3,500	Heavy duty



HARDWOOD CROSSARMS

POLE LINE HARDWARE - CROSSARMS & GAINS

Features

Kortick wood cross arm assemblies save time and money. Pre-assembled with quality Kortick hardware, they are available in varying lengths, duties, and assemblies. Please inquire with engineering for custom design requests. Pictured is a generic assembly with pole top pins. Dead end assemblies also available with hardwood designed for dead end strength applications.



Insulator Pins

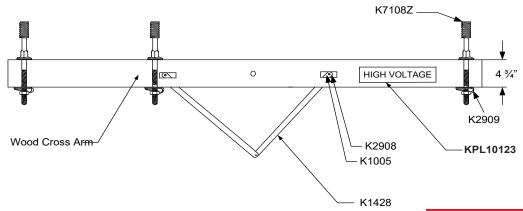
Part Number	Description	Dimension	Ultimate Force	Douglas Fir Equiv- alent	Ultimate Force
KWDH10032	Hardwood arm 8' light	2-3/4 x 3-3/4 x 8	2062	3-3/4 x 4-3/4 x 8	1975
KWDH10045	Hardwood arm 8' heavy	2-3/4 x 4-3/4 x 8	5740	4-3/4 x 5-3/4 x 8	5314
KWDH10047	Hardwood arm 8' extra heavy	2-3/4 x 5-1/4 x 8	7860	5-3/4 x 6-3/4 x 8	7331
KWDH10052	Hardwood arm 10' light	2-3/4 x 3-3/4 x 8	2050	3-3/4 x 4-3/4 x 8	1822
KWDH10055	Hardwood arm 10' heavy	2-3/4 x 4-3/4 x 8	4510	4-3/4 x 5-3/4 x 8	4102
KWDH10057	Hardwood arm 10' extra heavy	2-3/4 x 5-1/4 x 8	6183	5-3/4 x 6-3/4 x 8	5760

WOOD CROSSARMS

Features

Standard wood crossarm is 8ft long and made from douglas fir.

Part #: KSMUD10000803



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HARDWOOD PRODUCTS

POLE LINE HARDWARE - CROSSARMS & GAINS

The Ideal Wood Cross Arms

Naturally Durable Hardwoods



All hardwoods originate from Managed Forests, Certified by the Forest Stewardship Council with Chain of Custody

Environmental Stewardship - Promote environmental stewardship to mitigate preservation treatment of wood, as well as Promote Sustainable Forest Management Practices For More information on FSC forests:

http://www.fsc.org/

http://www.greenpeace.org/international/en/campaigns/f orests/solutions/alternatives-to-forest-destruc/

DESIRABLE ATTRIBUTES

- Natural amazon wood requiring no preservation treatment
- High mechanical strength (Fiber Strength)
- Field life 80 yrs
 - o Resistance to moisture absorption
 - o High resistance to rot
 - o High resistance to termites and wood peckers
- High flame resistance (Charring Rate-3mm)
- No disposal issues
- Very high salvage value
- No changes in field work practices
- Life-cycle cost is less than 1% the lifecycle cost of the treated Doug Fir cross arms



Approved by the Standards Review Board in 2010 as: ANSI O5.6 – All Natural Durable Hardwoods Cross arms and Braces – Dimensions & Specifications



For more information, please contact us at; **Kortick Manufacturing:** 2230 Davis Ct, Hayward, CA 94545

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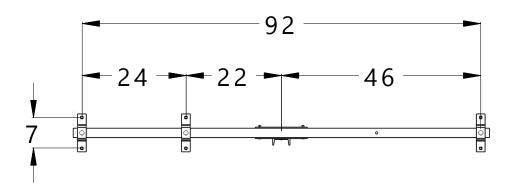


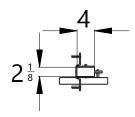
CUTOUT BRACKET ARMS

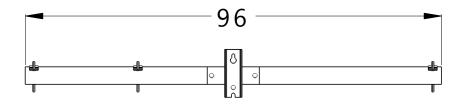
POLE LINE HARDWARE - CROSSARMS & GAINS

Features

K8425, K8425-48, and custom cutout arms are available in hardwood and fiberglass with channel mounting brackets, and individual cutout mounting brackets. Please see page 99 for additional information on hardwood. Please call for testing data showing hardwood's improved numbers over apitong. The AK8425CHANNEL mounting bracket provides additional strength. Available as an assembled arm or individual components as needed.









K8425 in Hardwood. 2" plates. all other hardware is the same as drawn above.

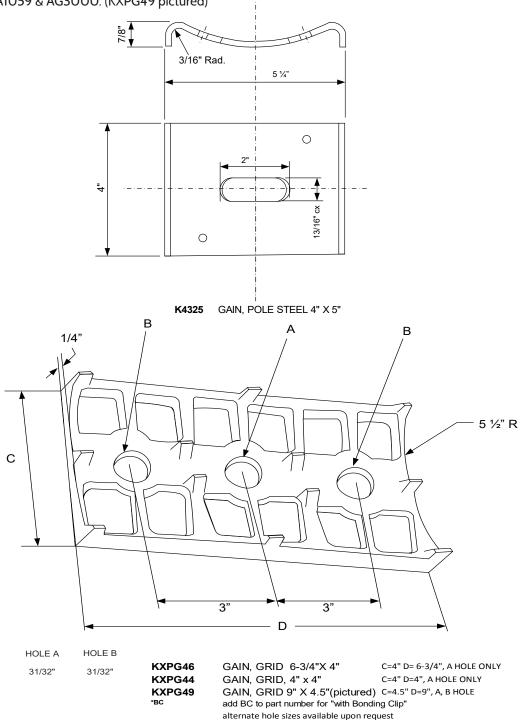


POLE GAINS

POLE LINE HARDWARE - CROSSARMS & GAINS

Features

K4325 Telephone design reinforces between cross arm and pole for improved rigidity. Will accommodate 5/8 and 3/4 bolts. Steel Gain offers improved performance in fires over plastic designs. Wood Grid Gains strengthen bolt connections by distributing load and allowing for drainage. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000. (KXPG49 pictured)





CROSS ARM REINFORCING BRACKET

POLE LINE HARDWARE - CROSSARMS & GAINS

Features

Kortick cross arm reinforcing hardware is used in a wide array of applications to reinforce wood and additional strength at points of excess strain. Plates distribute the load in tension over a greater surface area and reinforce the wood fibers of a pole against shear resulting from excessive down pull. These plates are the quiet workhorse of the pole line hardware industry. Custom specs and applications are available please inquire for further information.

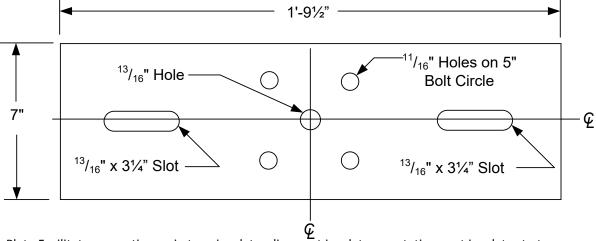
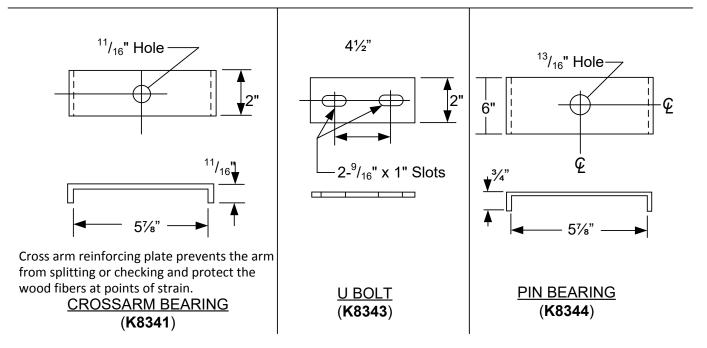


Plate Facilitates mounting a pin type insulator, line post insulator, or station post insulator to two crossarms

Double Arming (K8399)



The above gives a general idea of the many types of "Plates" available. If one of the above units does not solve the problem, please refer your specifications to the nearest Kortick representative.

To request Armorgalv® finish add "TDG" to the end of part number

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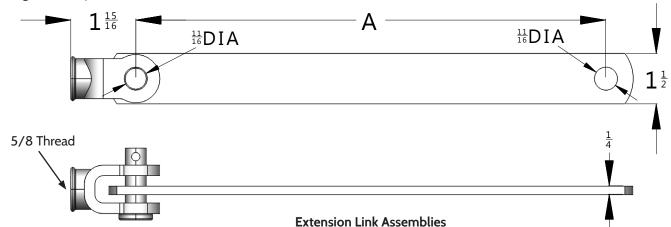


EXTENSION LINKS

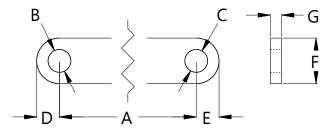
POLE LINE HARDWARE - EXTENSION LINKS

Features

The Kortick extensions link between the clevis ends of the insulator and the second dead end. The included 5/8in clevis nut can be purchased seperately (K8358CN). Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



Part Number	Length (A)	Notes
K8355	5	Link Only
K8358	14	Assembly
K8359	30	Assembly



Extension Links

Part Number	Length (A)	Hole B	Hole C	F	G
KM182219	22-3/4"	11/16"	13/16"	2"	3/4"
KM182414	62-1/2"	11/16"	13/16"	2"	3/4"
KM182416	74"	11/16"	13/16"	2"	3/4"
KM182417	80"	11/16"	13/16"	2"	3/4"
KM182418	85-1/2"	11/16	13/16"	2"	3/4"
KM182306	85-1/2"	1-1/16"	1-1/16"	2"	3/4"
KM182477	85-1/2"	13/16"	13/16"	2"	3/4"
KM182419	91"	11/16"	13/16"	2"	3/4"
KM182459	108-1/2"	11/16"	13/16"	2"	3/4''

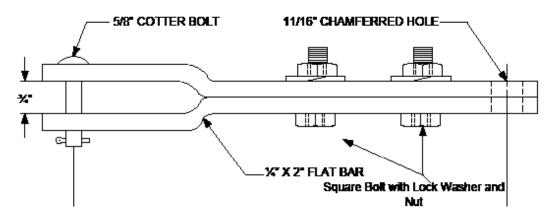


To request Armorgalv® finish add "TDG" to the end of part number

EXTENSION LINKS

Features

The Kortick K8258 series extension links are heavier duty then industry standard. Strong and reliable in crucial situations at dead ends and corner structures when additional climbing space is needs. KIF10180 is a lighter weight extension link similar in function to the K8258 series.



Extension Links

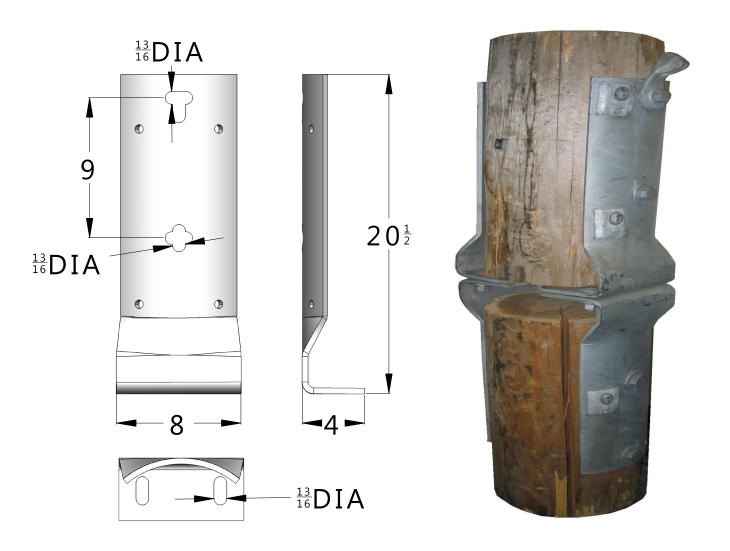
Part Number	Length (A)	Material	Notes
K8258-10	10	1/4 x 2	For trans and dist
K8258-12	12	1/4 x 2	For trans and dist
K8258-18	18	1/4 x 2	For trans and dist
K8258-24	24	1/4 x 2	For trans and dist
K8258-42	42	1/4 x 2	For trans and dist
KIF10180	14	3/16 x 1-1/2	Clevis to eye

POLE TOP EXTENSIONS

POLE LINE HARDWARE - SPECIALTY PRODUCTS

Features

Wood pole top extensions provide for additional length from 5'-8', while maintaining the same class of pole. They are strong enough to guy and run attachments. Extensions are bolted together with 3/4" x 2-1/2" Grade 5 Hex Head Bolts, round washers, lock washers and heavy hex nuts (four each). Extensions include mounts for detachable pole steps. Provide 3/4" gap between Top Pole Top Extension and New Pole section. Provide 2 1/4" gap below pole top extension and existing pole to install nut and washer on bolt. Please inquire for part number.

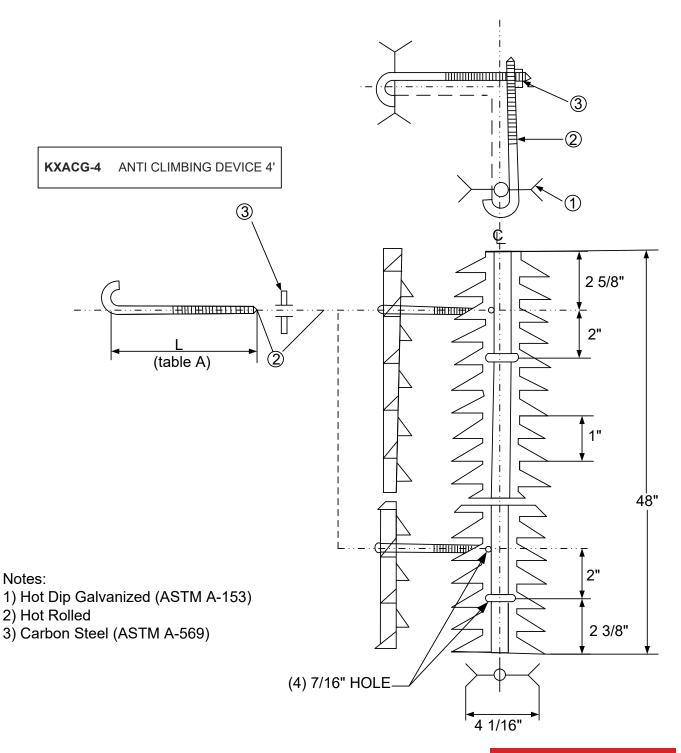


Note: Detachable pole step mounts are not shown in the above drawing, but are present in the final part.

ANTI CLIMBING POLE LINE HARDWARE - SPECIALTY PRODUCTS

Features

Anti Climbing Devices for lattice transmission towers, fencing, and other security applications, hot dip galvanized per ASTM spec. Hardware included for quick attachment.



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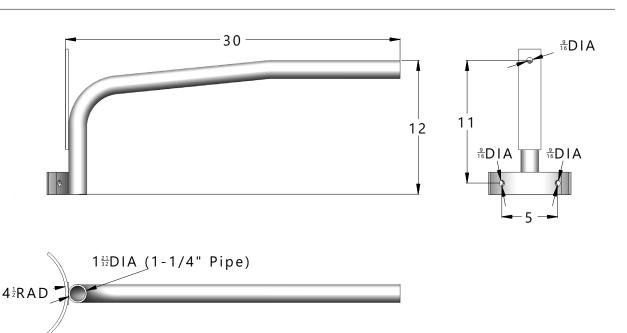


CANTILEVER MAST ARM

POLE LINE HARDWARE - SPECIALTY PRODUCTS

Features

Cantilever style mast arms are used to mount lights to wood poles. They are available in other sizes then shown. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000. Please inquire for part numbers.



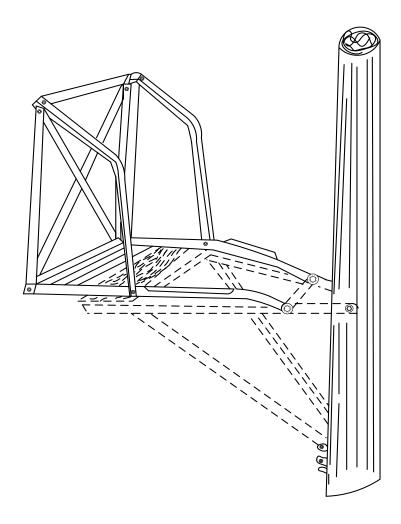
TERMINAL BALCONY

POLE LINE HARDWARE - SPECIALTY PRODUCTS

Features

Kortick B terminal balconies provide a safe working platform 20 inches wide by 18 inches deep with a guard rail to protect the lineman. A step is provided, the hinge platform can be turned upwards to avoid the accumulation of snow or ice. Balcony is fully assembled but collapsed (pictured) for shipping purposes.

Part #: K2022



K2022 BALCONY, TERM B 12"X18"

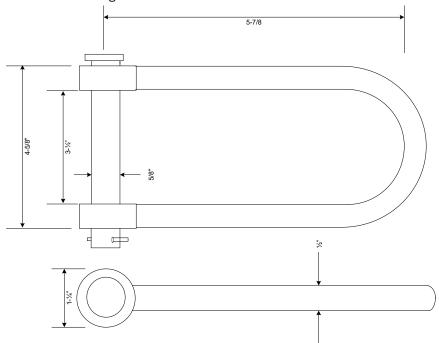
HOLD DOWN SHACKLE

POLE LINE HARDWARE - TRANSMISSION PRODUCTS

Features

Kortick's hold down shackle can be used with hold down hooks (see page 109) and weights to counter balance uplift. Equipped with a 5/8 clevis pin and cotter key. Ultimate strength is 10,000 lbs. It is available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.

K9166-5/8 Hot-dip galvanized finish
K9166-5/8TDG Thermal-diffusion galvanized finish

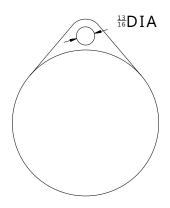


HOLD DOWN WEIGHT

Features

Hold down weights can be used to counter balance uplift. Equipped with a 3/4 mounting hole. They are available hot dip galvanized per ASTM A153.

Part Number	Weight	Shape
KX130-344	60lbs	Spherical
Please inquire	100lbs	Disk
Please inquire	150lbs	Disk



To request Armorgalv® finish add "TDG" to the end of the part number



HOLD DOWN HOOK

Features

 $\frac{3}{4}RAD$

Kortick hold down hooks come standard with a square nut and lock washer. Hooks can be used to attach hold down weights (60lb weight part number is KX130-344). The are roll threaded 5/8 - 11 UNC. Hold down hooks are hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000. They are available with custom overall and thread lengths.

5/8 dia. x 10 length (A) K2750 K2756 5/8 dia. x 16 length (A) 6

To request Armorgalv® finish add "TDG" to the end of the part number



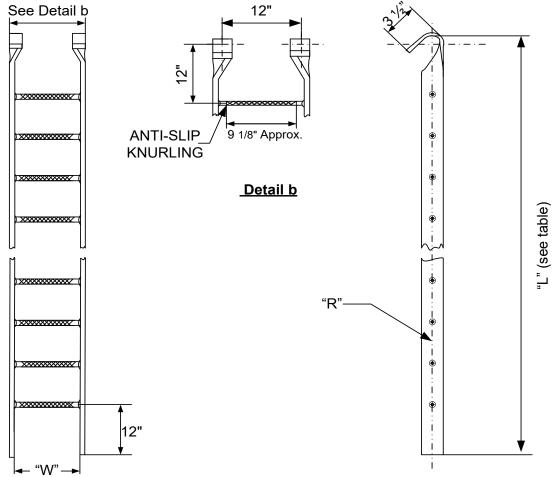
MANHOLE LADDERS

UNDERGROUND HARDWARE-LADDERS

Features

Kortick ladders are formed with the hooks hot forged as a part of the single piece of steel for additional strength. Rungs are forged from "bolt" steel with twelve-inch centers and riveted for maximum strength. All ladders shipped singly.

**Please inquire about custom spec ladders. Kortick manufactures a variety of ladder styles.



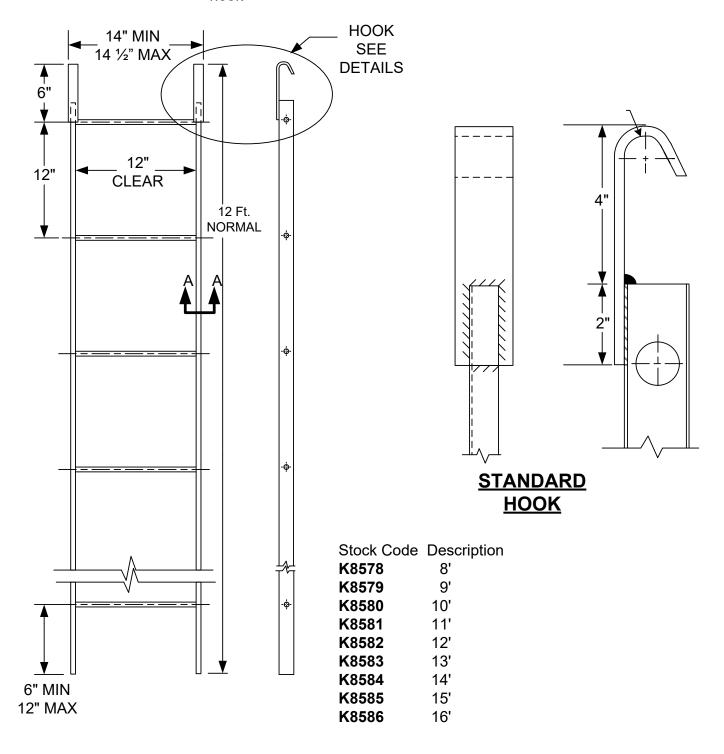
STOCK NO.	(L) LENGTH	(W) WIDTH	(R)Steel Size	RUNG	Number of Steps
K5275	5'-10"	1'-0"	3/8" X 1 ½"	5/8"	4
K5276	6'	1'-0"	3/8" X 1 ½"	5/8"	5
K5277	7'	1'-0"	3/8" X 1 ½"	5/8"	6
K5278	8'	1'-0"	3/8" X 1 ½"	5/8"	7
K5279	9'	1'-0"	3/8" X 1 ½"	5/8"	8
K5280	10'	1'-0"	3/8" X 1 ½"	5/8"	9
K5281	11'	1'-0"	3/8" X 1 ½"	5/8"	10
K5282	12'	1'-0"	3/8" X 1 ½"	5/8"	11
K5284	14'	1'-0"	3/8" X 2 ½	5/8"	13
K5286	16'	1'-0"	3/8" X 2 ½"	5/8"	15



WELDED HOOK LADDERS

UNDERGROUND HARDWARE - LADDERS

Channel Style with welded manhole step hook



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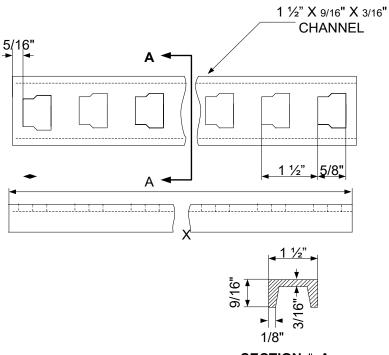
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UNDERGROUND HARDWARE - CABLE RACKS AND HOOKS

Features

Kortick underground cable racks support the cable runs in manholes and interior cable vaults. Cable racks are fabricated from $l-1/2 \times 9/16 \times 3/16$ -inch channel steel. Special slots rigidly grip and support the cable hook. Mounting holes are $11/16 \times 13/16$ inches. Racks attached to the wall with 1/2-inch bolts and expansion shields. Cable racks are available in lengths ranging from 8 holes to 47 without tab and 8 to 18 holes with tab. Kortick cable racks are made with industry standard hole spacing of $1 \frac{1}{2}$ inches. The with tab cable racks (not pictured) interlock to create longer cable racks when needed.



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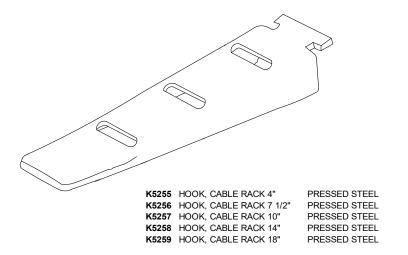
Stock Code	Description
K5108	RACK, CABLE 8 HOLE W/ TAB
K5114	RACK, CABLE 14 HOLE W/TAB
K5118	RACK, CABLE 18 HOLE W/ TAB
K5120	RACK, CABLE 37 HOLE W/O TAB
K5122	RACK, CABLE 47 HOLE W/O TAB
K5150	RACK, CABLE 8 HOLE W/O TAB
K5152	RACK, CABLE 12 HOLE W/O TAB
K5153	RACK, CABLE 14 HOLE W/O TAB
K5155	RACK, CABLE 16 HOLE W/O TAB
K5156	RACK, CABLE 18 HOLE W/O TAB
K5160	RACK, CABLE 22 HOLE W/O TAB
K5162	RACK, CABLE 24 HOLE W/O TAB
K5164	RACK, CABLE 27 HOLE W/O TAB
K5165	RACK, CABLE 28 HOLE W/O TAB
K5166	RACK, CABLE 32 HOLE W/O TAB
K5170-43	RACK, CABLE 43-HOLE W/O TAB

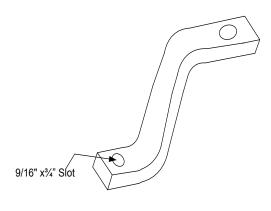


CABLE RACK SUPPORTS

Features

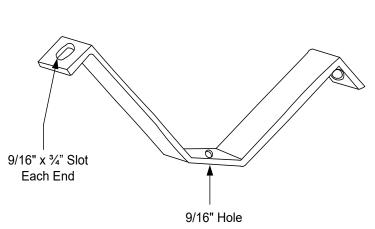
Cable rack hook provides mounting for cable racks. K6085 "S" support provides standoff for cable racks from walls and corners.





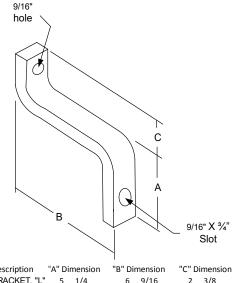
Part #: K6085

SUPPORT BRACKETS



Stock Code Description

K6087 SUPPORT, CORNER CABLE RACK "B"12"X12" K6089 SUPPORT, CORNER CABLE RACK "B" 18"X18"



Stock Code Description "A" Dimension BRACKET, "L" K6090 5 1/4 6 9/16 2 3/8

To request Armorgalv® finish add "TDG" to the end of part number

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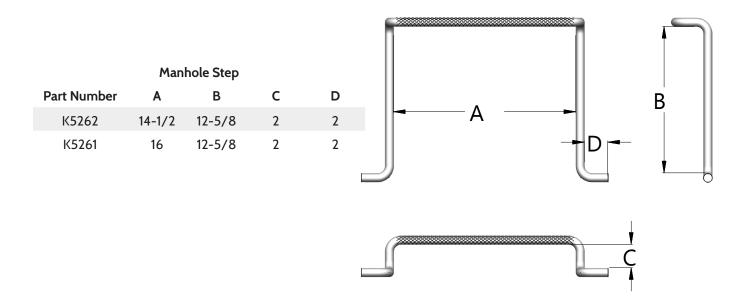


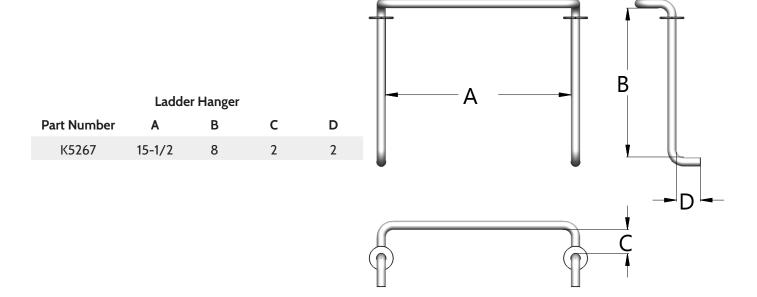
MANHOLE STEPS

UNDERGROUND HARDWARE- UNDERGROUND STEPS & PULLING IRONS

Features

Manhole steps are forged out of 3/4 diameter steel. Hot dip galvanized per ASTM A153.





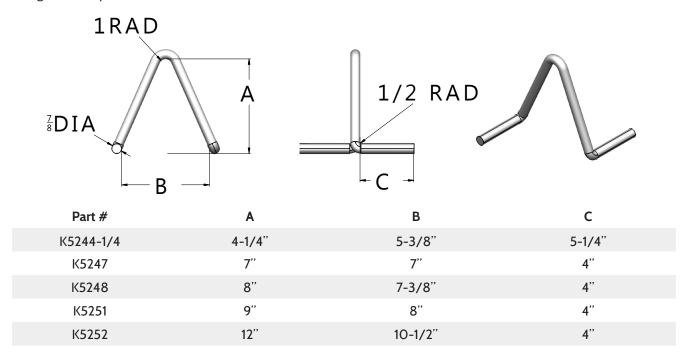


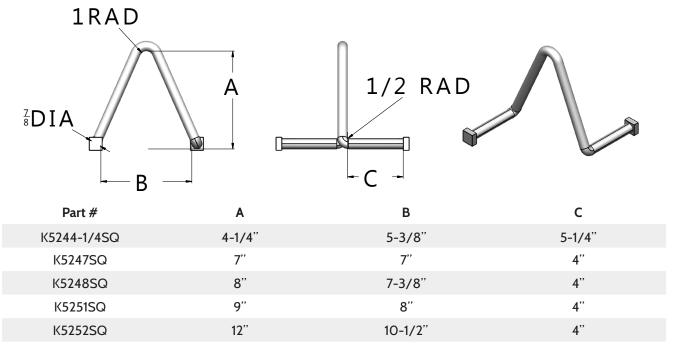
PULLING IRONS

UNDERGROUND HARDWARE - UNDERGROUND STEPS & PULLING IRONS

Features

Pulling-in irons provide attachments for pulling-in blocks during instillation or removal of cables when set into the walls of manhole vaults. Pulling Irons are manufactured from ASTM A-107, 7/8 diameter, carbon steel. Also available in stainless steel (add "SS" to the end of the part number). Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.





To request Armorgalv® finish add "TDG" to the end of part number

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UNDERGROUND HARDWARE - UNDERGROUND STEPS & PULLING IRONS

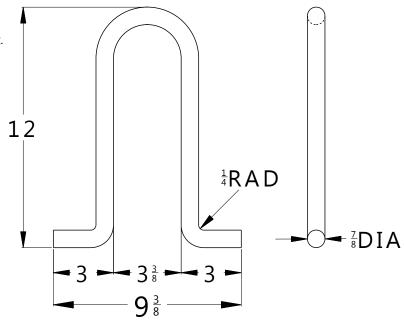
Features

Draw bolts are similar to pulling-in irons and are set into the walls of electric manholes. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.

K8301 Hot-dip galvanized finish

K8301TDG Thermal-diffusion galvanized finish

*Other sizes available upon request.



To request Armorgalv® finish add "TDG" to the end of part number



THREE PHASE MOUNTING BRACKETS

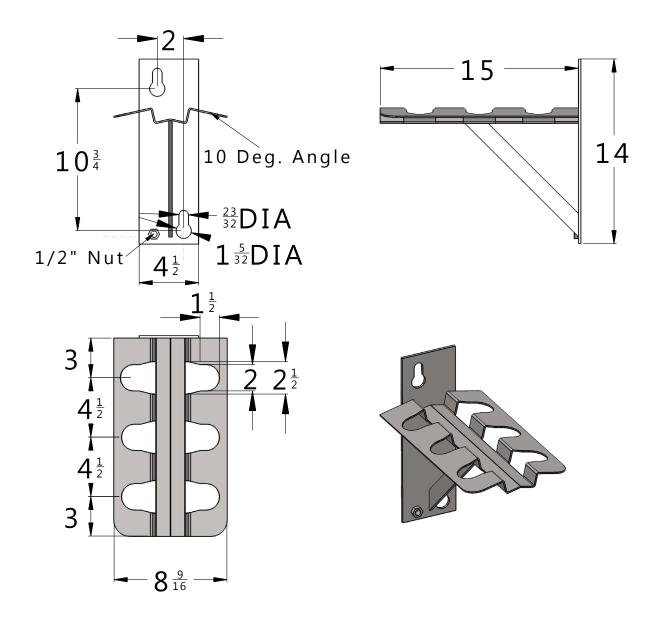
UNDERGROUND HARDWARE - MISCELLANEOUS PRODUCTS

Features

Kortick's three-phase load-break standoff mounting bracket can be used to standoff and ground 200amp loads. It allows connectors on a switch or transformer to be disconnected safely outside the underground vault with a hot stick. The bracket also allows the connectors to be parked while working on equipment.

K4588 Hot-dip galvanized finish

K4588TDG Thermal-diffusion galvanized finish



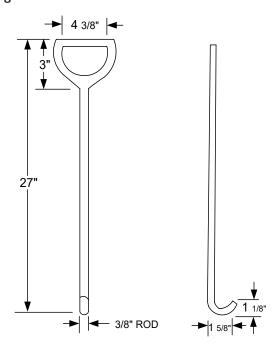
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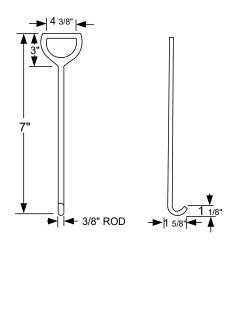
MANHOLE HOOK

UNDERGROUND HARDWARE - MISCELLANEOUS PRODUCTS

K5126 - Long Manhole Hook

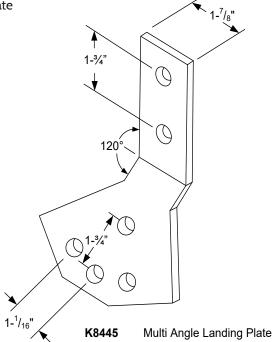


K5125 - Short Manhole Hook



MULTI-ANGLE LANDING PLATE

K8445 - Multi Angle Landing Plate





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MARINE HARDWARE - MISCELLANEOUS

KMAR10220 - Finger "A" Brace		KMAR10190- Wheel Plate	
SQUARE HOLE (4)		KMAR10180 - Pile Roller Bracke	t ·
	9/16" SLOT (2)	9-½" 13/16" HOLE (2)	3"

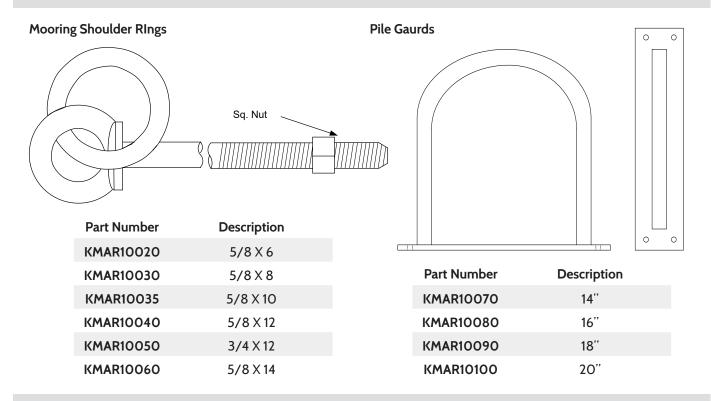
To request Armorgalv® finish add "TDG" to the end of part number

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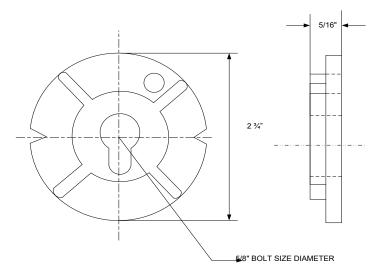
MARINE HARDWARE - MISCELLANEOUS



MALLEABLE IRON ROUND WASHERS

Features

Malleable iron round washers are used with poles and other wood solutions, most notably in the marine industry. Available hot dip galvanized per ASTM A153 or thermal diffusion galvanized per A1059 & AG3000.



Part Number	Diameter
K1522MI	3/8
K1524MI	1/2
K1525MI	5/8
K1526MI	3/4
K1527MI	7/8
K1528MI	1
K1529MI	1-1/8
K1530MI	1-1/4



K1525MI WASHER, MALLEABLE IRON 5/8"

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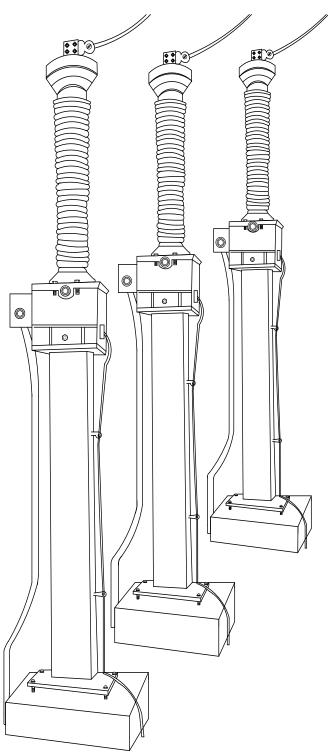
To request Armorgalv® finish add "TDG" to the end of part number

SUBSTATION STRUCTURES

FABRICATION HARDWARE - MISCELLANEOUS

Features

Please inquire for additional information. Kortick fabricates a wide range of substation structure equipment. (CCVT Pedestals pictured)



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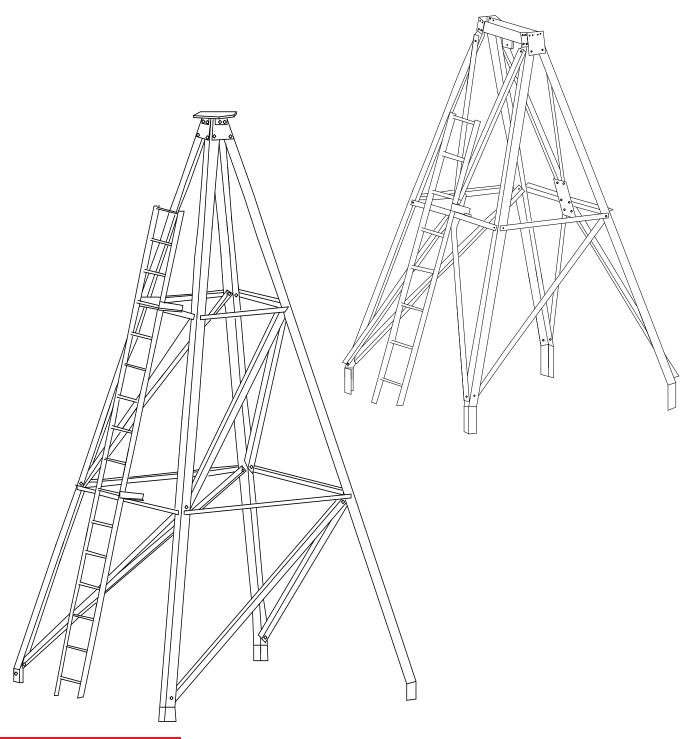
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STATIC WIRE PEAK FABRICATION HARDWARE - MISCELLANEOUS

Features

Kortick OPGW static wire goat peaks are installed on transmission towers and available in varying designs; please inquire for additional information and capabilities. (9' and 18' Goat Peak reflected in drawings. Part numbers available upon request.)





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HISTORY 124

In 1898, the late Mr. J. C. Kortick was importuned by Pacific Tel. & Tel. Co., the then operating telephone company in San Francisco, to make certain steel braces and bolts for their pole line construction needs. In 1900, the telephone company reincorporated as the Pacific States Telephone and Telegraph Co., and broadened their operating area. Kortick stepped up his production, at their request, and continued to supply more and more of their pole line hardware requirements over their growing operating area.

On April 18th, 1906, San Francisco was badly shaken up by the great earthquake that reduced about one-quarter of its land area, including the Kortick plant, to ashes by fire. The telephone company restored temporary service to some residents within days, but needed hardware for the more permanent type of pole line construction. The problem then, how soon can the Kortick plant start making pole line hardware? While Kortick dug what machinery he could salvage out of the ashes and put it into operating condition, the telephone company barged a load of lumber over from Oakland, and hauled it with their own teams to the site of the Kortick plant. Kortick constructed a shed, set up his machinery, and by the first of May that year, he was turning out pole line hardware and the telephone company was mounting it on the poles BLACK. Since steel was not immediately available, a lot of Kortick's first production was salvaged hardware from the ruins of burned down poles.

In 1912, Kortick got contracts for extensive telephone line construction developed in British Columbia, and through the Northern Electric Co. of Canada (Western Electric Co. of U/S). Kortick fabricated and shipped some 100 or more tons of pole line hardware – in those days no small order for the Pacific Coast.

In 1919, Kortick expanded to southwestern utilities and telephone companies.

In 1924, the General Purchasing Department of the Western Electric Co. at New York realized the volume of pole line hardware and other telephone supplies purchased on behalf of their Pacific Coast subsidiaries had developed in volume sufficiently to justify the establishment of a Pacific Coast Purchasing Department under a Pacific Coast Purchasing Agent. At that time Kortick became the first contract supplier for pole line hardware on the Pacific Coast for the telephone companies, through the Western Electric Co., in successful competition against all eastern manufacturers.

In 1925, Southern California Edison, Co. erected the first 220 KV line on the Pacific Coast and used specially designed hardware. Kortick was the only Pacific Coast manufacturer submitting a quote. The Southern California Edison Co. was elated to be able to make this purchase on the Pacific Coast, and was highly pleased with the material delivered and the service rendered.

In 1925, Kortick also began shipping pole line hardware into the Pacific Northwest at the invitation of the Power Company, and set up sales representatives to service our interests.

During the 3-year period from 1947 to 1949, a representative of the Kortick Manufacturing Company represented the pole line hardware manufacturers on the Pacific Coast and sat on the EEI Committee on Standard Packaging. Kortick had been using wire bound boxes since 1945 and had made considerable progress in standard packaging in their own plant. The results of this experience were available to the eastern EEI Committee and were used extensively in the final adoption of the present industry Standard Packaging Program.

During the war years, Kortick produced many thousand tons of pole line hardware for government projects in the Pacific and in the Orient.

By 1940, Kortick had outgrown its quarters, so Kortick purchased new property four times as large in the area and proceeded to build a new plant. The plant building was 95% completed in December 1941 when war broke out, and the US Navy and Maritime Commission commandeered that building for the war effort until 1950. The office and warehouse section was completed and ready for occupancy in 1953. This move to a more desirable location and to



more convenient and efficient operation conditions tripled Kortick's plant production facilities and doubled the San Francisco warehouse facilities, the better to back up pole line hardware stocks in Maydwell and Hartzell warehouses in Seattle, Portland, San Francisco, Los Angeles, Sand Diego, and Phoenix, and of Kortick's distributor in Honolulu.

In the late 20th century, Kortick added an aerospace industry press, modern welding equipment, and other manufacturing upgrades. Most recently, in the 2000's, Kortick added computer controlled milling operations and two modern presses to the arsenal. Kortick continues to employ top-flight industrial, mechanical, and electrical engineers, allowing continual improvement in product design and operational efficiency.

In 2002, the company moved from its long time home in San Francisco to Hayward, California, a few short miles across the bay, where operations continued without interruption. In fact, in a miraculous feat of commitment to its customers, the company did not miss a single day of shipping product, while at the same time moving its operations via 175 truckloads across the Bay.

In December of 2013 Kortick started production in its state of the art thermal diffusion galvanizing plant, which is setting new industry standards for galvanizing.

Kortick Manufacturing Company is a California corporation, owned and operated by San Francisco Bay Area residents. Operational profit goes back into the business to continually provide for the expansion of the business. Kortick looks forward to building on the commitment to customers that started in the 19th century as it presses forward into the 21st.



J. C. Kortick founder 1875 - 1933



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