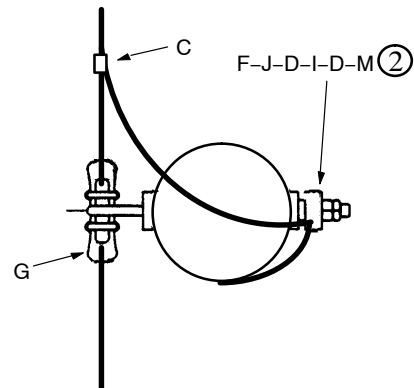
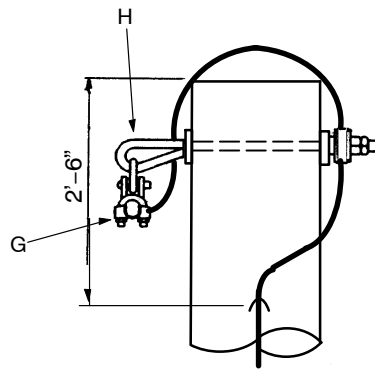
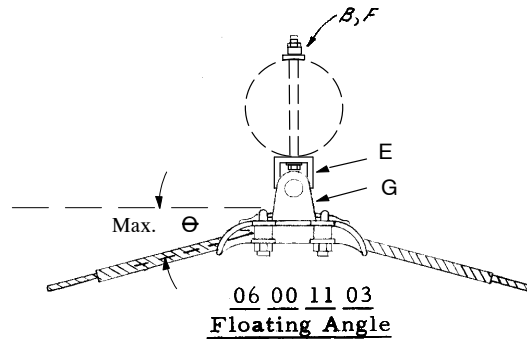


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06 00 11 04
34kV & 69kV Tangent and Angle

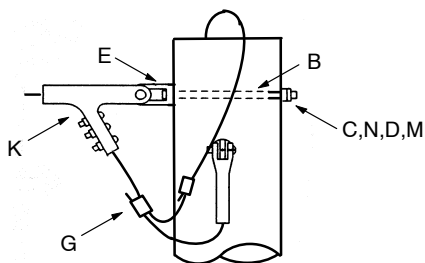


06 00 11 03
Floating Angle

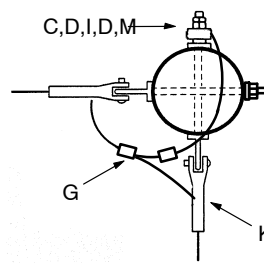
NOTE:

- For pole top static, see stds. 06 12 02, 06 12 03 **.
- Smallware must be assembled in order listed starting at pole face. Welded nut-washer included with item H not used on 04 and wood poles.

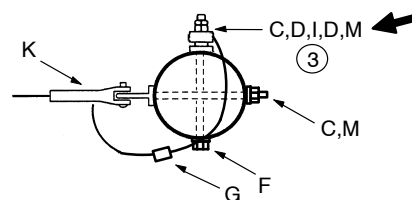
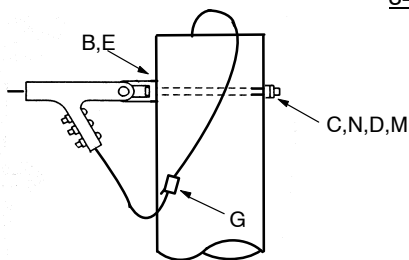
		Std. / Stk. No.	Description	06 00 11 **	03	04
@	B	23 52 097	Bolt, Machine 3/4" x 12"		1	
	C	23 68 234	Clamp, Guy Wire, 1/2" (used with 12/7 ACSR Static)		1	1
		17 51 032	Clamp, Parallel Groove (used with 1/0 AAAC Static)			1
	D	23 15 001	Nut, Square, 3/4"			2
@	E	23 59 095	Eyelet, 3/4" Bolt		1	
	F	23 66 131	Washer, Square, 3" x 3" w/ 3/4" Bolt Hole			1
	G	SC*W	Clamp, Suspension (armor over 300' span)		1	1
	H	23 68 458	Static Support, 3/4" x 14"			1
	I	23 68 496	Clip, Bonding, 3/4" Bolt Dia.			1
	J	23 66 135	Washer, Lock 3/4" Dbl. Coil Type			1
	M	23 65 042	Nut, Lock, 3/4" HDG Steel, Square			1



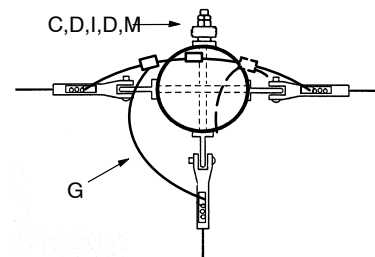
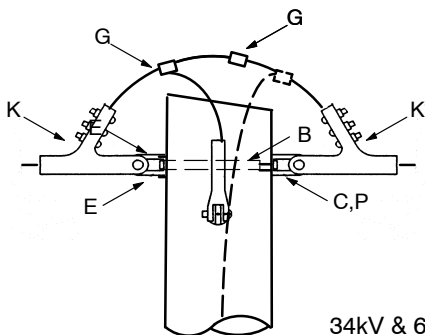
06 00 11 05
34kV & 69kV Corner Deadend



06 00 11 08
34kV & 69kV Deadend Endline



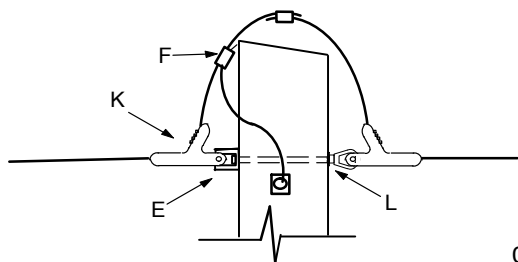
06 00 11 10
34kV & 69kV 3-Way Deadend w/o Pole Ground
06 00 11 11
34kV & 69kV 3-Way Deadend w/ Pole Ground



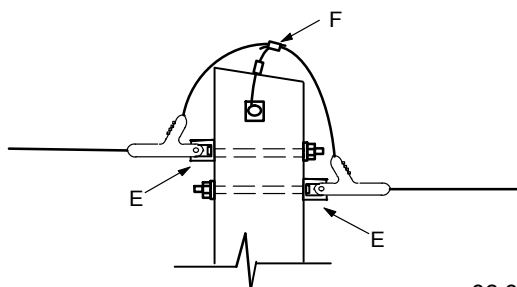
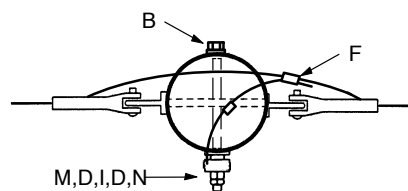
NOTES:

3. Assemble items in order listed to retain pole ground wire.

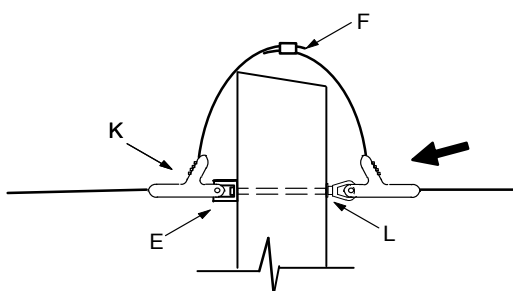
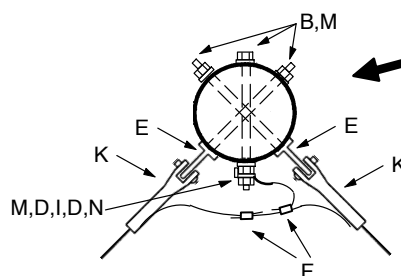
		Std. / Stk. No.	Description	06 00 11 **	05	08	10	11
@	B	23 52 097	Bolt, Mach., 3/4" x 12"		2	2	2	2
	C	23 66 031	Washer, Curved, Square, 3" x 3" w/ 3/4" Bolt Hole		2	1	2	2
	D	23 15 001	Nut, Square, 3/4"		1	1	1	2
	E	23 59 095	Eyelet, 3/4", Steel, HDG		2	1	2	2
	F	23 66 131	Washer, Square, 2 1/4" x 2 1/4" w/ Hole for 3/4" Bolt		2	2	1	1
	G	23 68 234	Clamp, Guy Wire, 1/2 inch (used with 12/7 ACSR Static)		2	1	2	3
		17 51 032	Clamp, Parallel Groove (used with 1/0 AAAC Static)		2	1	2	3
	I	23 68 496	Clip, Bonding, 3/4" Bolt Dia.		1	1		1
	K	DEC*W	Clamp, Deadend		2	1	3	3
	M	23 65 042	Nut, Lock, 3/4" HDG Steel, Square		2	1	1	1
	N	23 66 135	Washer, Lock, 3/4", Dbl Coil Type		2	1	1	1
	P	23 65 018	Eyenuit, 3/4" Bolt				1	1



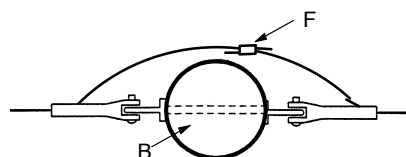
06 00 11 06
34kV & 69kV Deadend Tangent



06 00 11 07
34kV & 69kV Deadend Angle



06 00 11 09
34kV & 69kV Deadend Tangent

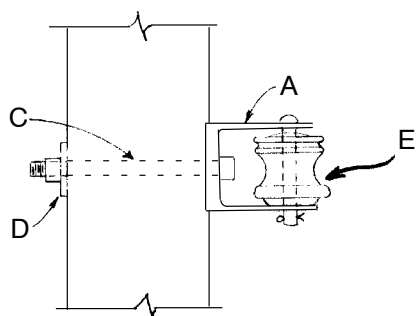


NOTES:

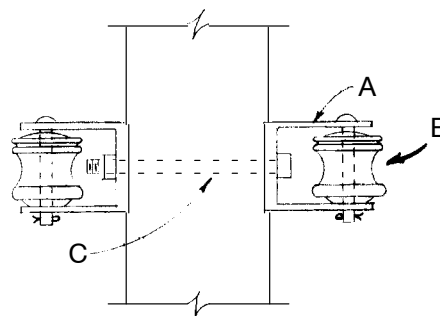
- Standard 06 00 11 09 used on switch pole ground wire not installed.

④

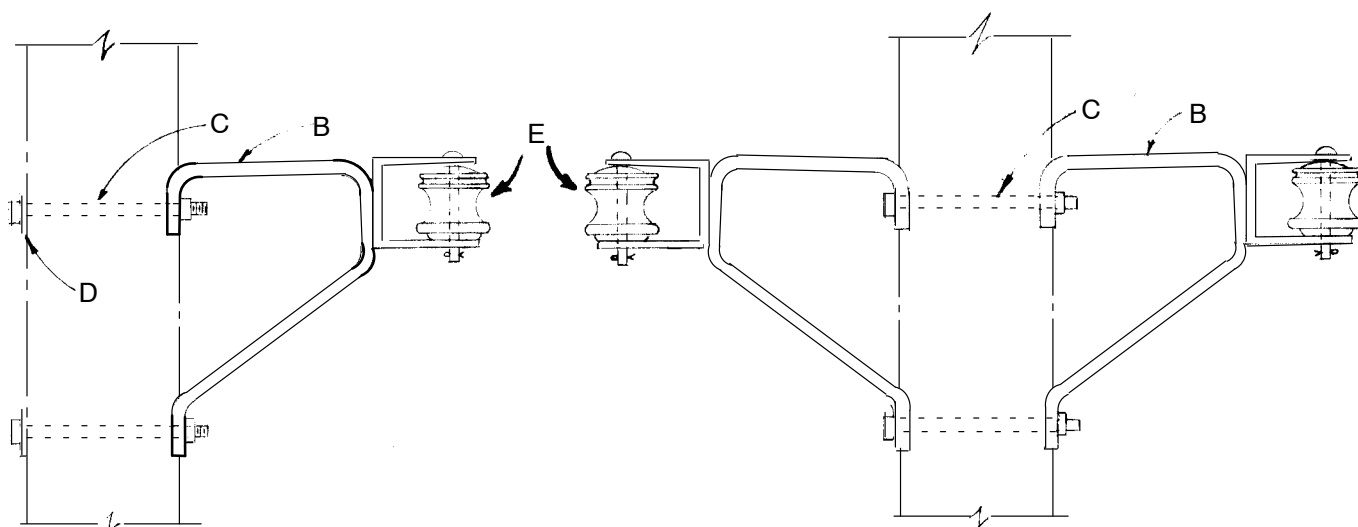
		Std. / Stk. No.	Description	06 00 11 **	06	07	09
@	B	23 52 097	Bolt, Mach., 3/4" x 12"		2	3	1
	D	23 65 059	Nut, Square, 3/4"		1	1	
	E	23 59 095	Eyelet, 3/4" Bolt		1	1	1
	F	23 68 234	Clamp, Guy Wire, 1/2" (used with 12/7 ACSR Static)		2	2	1
		17 51 032	Clamp, Parallel Groove (used with 1/0 AAAC Static)		2	2	1
	I	23 68 496	Clip, Bonding, 3/4" Bolt Dia.		1	1	
	K	DEC*W	Clamp, Deadend		2	2	2
	L	23 65 018	Eyenuit, 3/4" Bolt		1		1
	M	23 66 031	Washer, Square, Curved, 3" x 3" w/ 3/4" Bolt Hole		2	2	2
@	N	23 65 042	Nut, Lock, Square, Steel, HDG, 3/4"		1	2	



06 01 01 01
Secondary Clevis



06 01 01 02
Double Secondary Clevis



06 01 01 03
Single Clevis Extension Bracket

06 01 01 04
Dble - Single Clevis Extension Bracket

	Std. / Stk. No.	Description	06 01 01 **	01	02	03	04
A	23 06 040	Clevis, Sec. Insulator	1	2			
B	23 06 067	Brkt., Ext., 1 Clevis			1	2	
C	23 52 063	Bolt, Mach., 5/8" x 10"	1	1	2	2	
D	23 66 027	Washer, Square, 5/8"	1		2		
E	25 59 044	Insulator, Spool	1	2	1	2	

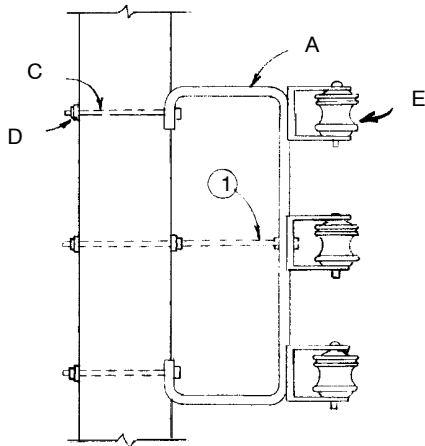
INSULATORS AND SUPPORTS

3 Wire Secondary Rack

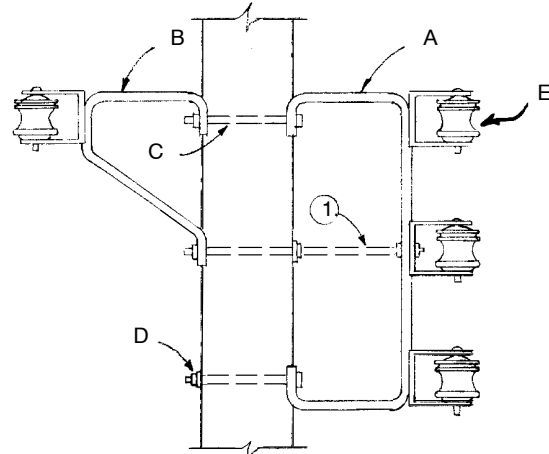
0 To 750 Volts

06 01 03 **

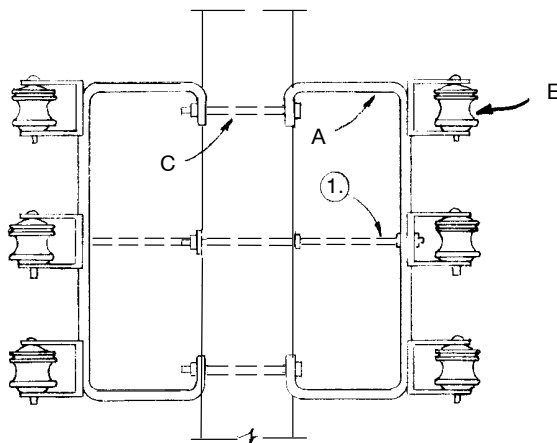
Sheet 1 of 1



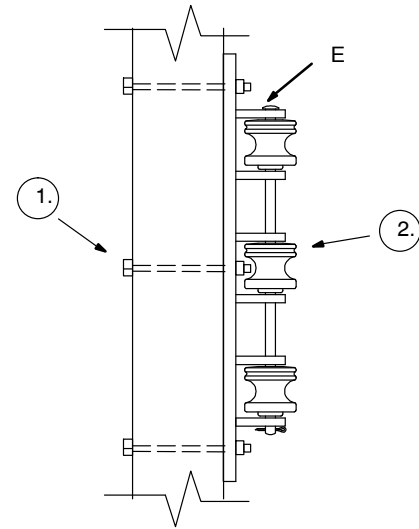
06 01 03 01
3 Clevis Extension Bracket



06 01 03 02
3 Clevis Extension Bracket
w/Single Clevis Bracket



06 01 03 03
Dble. - 3 Clevis Extension Bracket



06 01 03 04
3 Wire Secondary Rack

NOTES:

1. Reinforce with D.A. bolt for deadends or line angles in excess of 5°. Direction of center bolt can be reversed if threaded end interferes with clevis insulator.
2. Rack mounted directly on pole should be used in all cases unless climbing space requires use of the extension.

	Std. / Stk. No.	Description	06 01 03 **	01	02	03	04
	A 23 06 054	Bracket, Ext. 3 Clevis		1	1	2	-
	B 23 06 067	Bracket, Ext. 1 Clevis		-	1	-	-
	C 23 52 063	Bolt Mach., 5/8" x 10"		2	2	2	2
	D 23 66 027	Washer Square 5/8"		2	1	-	2
	E 25 59 044	Insulator, Spool		3	4	6	3
	F 23 11 001	Rack, Secondary, 3 Spool		-	-	-	1
@	G 23 53 014	Bolt, DA, 5/8" x 26"				1	
@	23 53 003	Bolt, DA, 5/8" x 18"		1	1		

**DISTRIBUTION
CONSTRUCTION STANDARDS**



ENG: DCG
REV. NO: 4
REV. DATE: 7/05/11

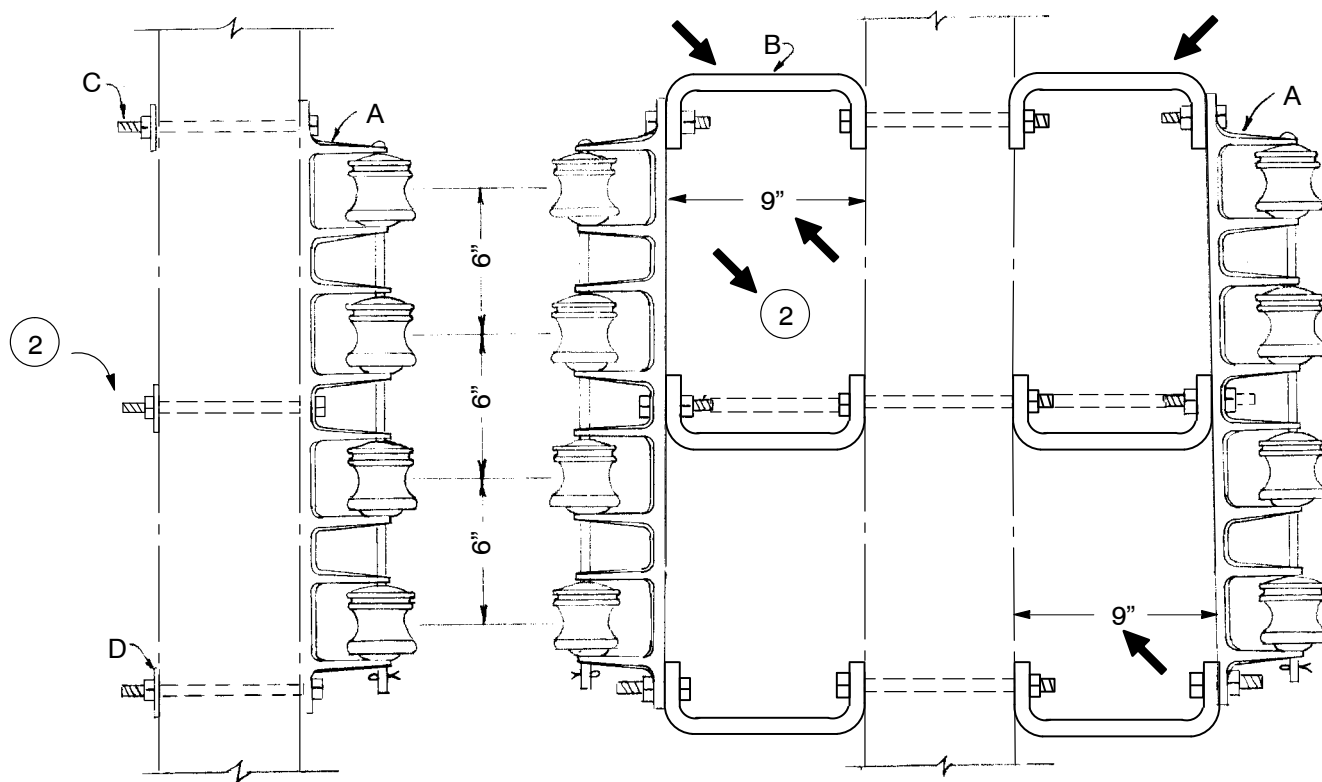
INSULATORS AND SUPPORTS

4 Wire Secondary Rack

0 To 750 V.¹

06 01 07 **

Sheet 1 of 1



06 01 07 01
4 Wire Secondary Rack

Single - 06 01 07 02
Double - 06 01 07 03
4 Wire Secondary Rack On Extension

NOTES:

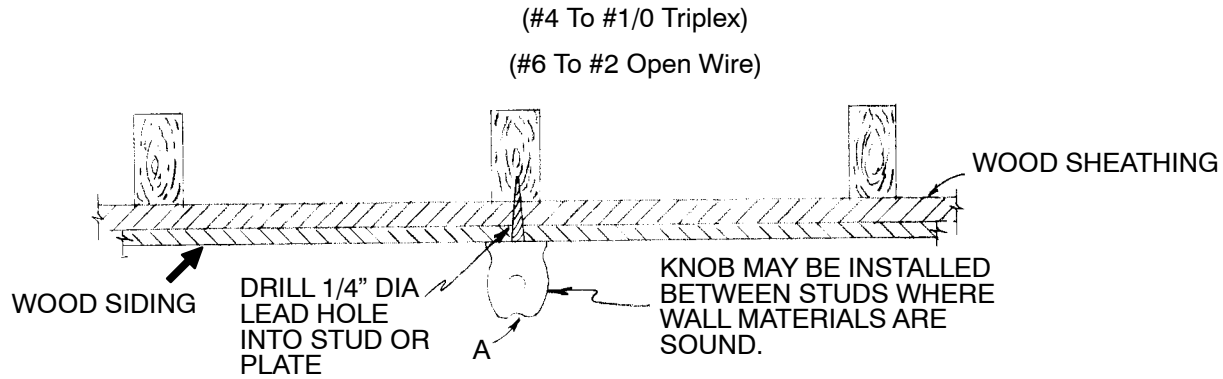
1. Normally used on 120/208 volt circuits.
2. Reinforce with D.A. bolt for line angles in excess of 5°.

	Std. / Stk. No.	Description	06 01 07 **	01	02	03
A	23 11 004	Rack, Sec. 4 Spool		1	1	2
B	23 56 056	Brkt., Ext., w/o Clevis			3	6
C	23 52 063	Bolt, Mach., 5/8" x 10"		2	2	2
D	23 66 027	Washer Square, 5/8"		2	2	2
E	23 52 049	Bolt Mach. 5/8" x 2"			2	4
F	23 53 014	Bolt D.A., 5/8" x 26"				1
	23 53 003	Bolt D.A., 5/8" x 18"			1	
G	25 59 044	Insulator, Spool		4	4	8

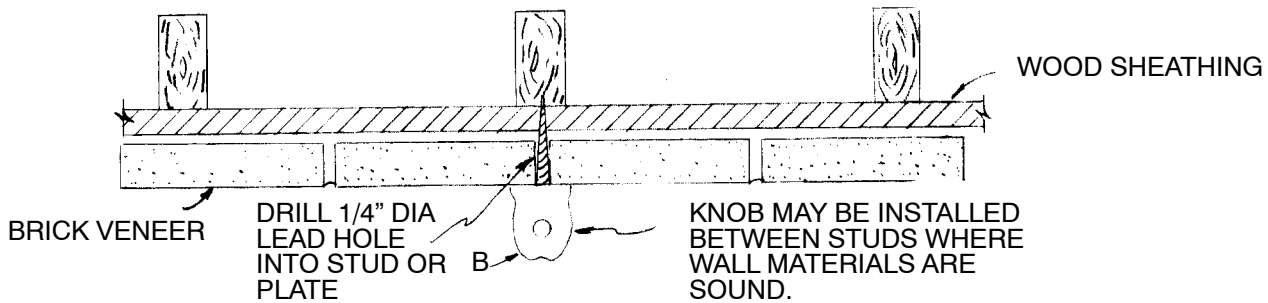
INSULATORS AND SUPPORTS
Service Attachment on Building and Mast
0 To 600 Volts

06 01 50 **

Sheet 1 of 3



06 01 50 01
Wood Siding



06 01 50 02
Brick Veneer or Composition Shingles

	Std. / Stk. No.	Description	06 01 50 **		01	02
A	23 06 077	Ins, Wire Holder, 2-1/4"			1	
B	23 17 241	Ins, Wire Holder, 3-1/2"				1

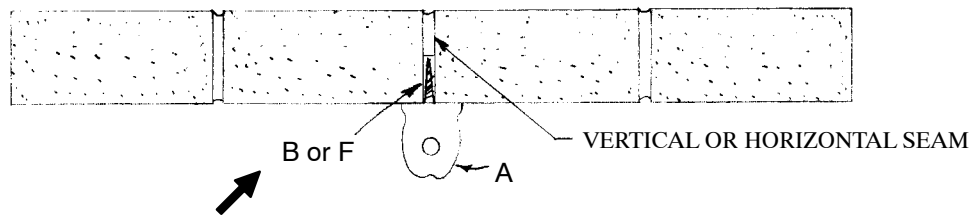
INSULATORS AND SUPPORTS

Service Attachment on Building and Mast

0 To 600 Volts

06 01 50 **

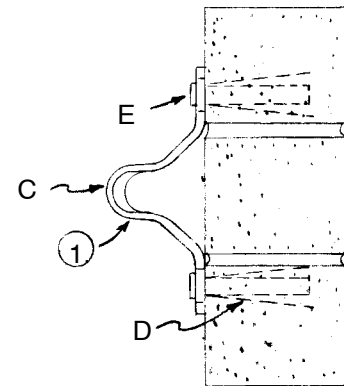
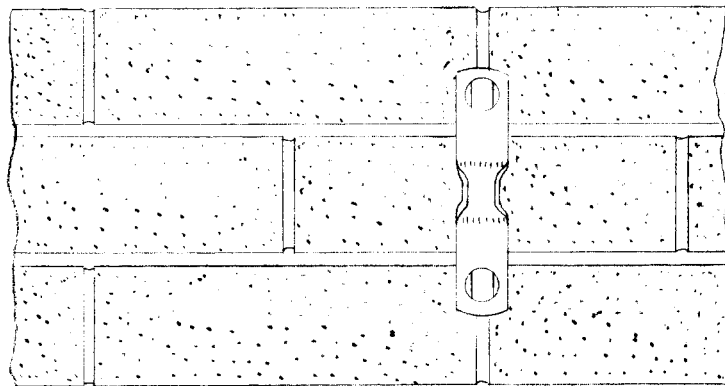
Sheet 2 of 3



06 01 50 03

06 01 50 04

Solid Masonry – Brick Or Cement
#4 To #2 Triplex – #6 To #2 Open Wire



1/0 Al. MSGR – 06 01 50 05

4/0 Al. MSGR – 06 01 50 06

Solid Masonry – Brick Or Cement
#1/0 Or Larger Triplex Cable (2)

		Std. / Stk. No.	Description	06 01 50 **	03	04	05	06
3	A	23 06 077	Ins., Wire Holder 2-1/4"		1	1		
	B	21 51 055	Shield, Exp., #22 Screw			1		
	C	23 06 057	Bracket, Wall Triplex				1	1
	D	21 51 016	Shield, Exp., 3/8" Bolt				2	
		21 51 018	Shield, Exp., 1/2" Bolt					2
	E	23 52 194	Bolt, Mach., 3/8" x 3"				2	
		23 52 034	Bolt, Mach., 1/2" x 4"					2
4	F	21 51 181	Shield, Exp., for 5/16 – 9 Lag Screw		1			

1. Mount bracket vertically on seams so that it spans one brick.
2. Also use for smaller services where due to nature of masonry porcelain knobs are unsatisfactory.
3. To be used with porcelain body wireholder item A.
4. To be used with nylon body wireholder item A.

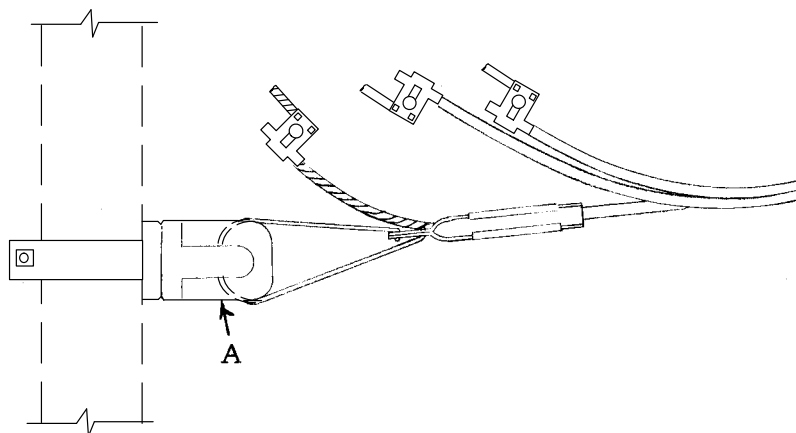
DISTRIBUTION
CONSTRUCTION STANDARDS



ENG:DCG
REV. NO: 2
REV. DATE: 08/19/11

INSULATORS AND SUPPORTS
Service Attachment on Building and Mast
0 To 600 Volts

06 01 50 **
Sheet 3 of 3



06 01 50 07

06 01 50 08

SERVICE MAST
(1 1/4" – 2 1/2" DIA. CONDUIT)

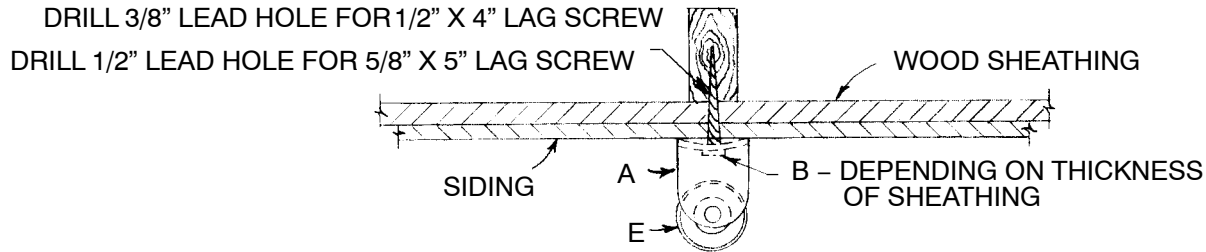
SERVICE MAST
(3" – 4" DIA. CONDUIT)

		Std. / Stk. No.	Description	06 01 50 **	07	08
	A	23 06 075	Insulator, Wire Holder, 1-1/4" – 2-1/2" Mast		1	
	B	23 06 082	Insulator, Wire Holder, 3"-4" Mast			1

INSULATORS AND SUPPORTS
Service Attachment on Building
0 To 600 Volts – (#6 Thru 750 MCM Conductors)

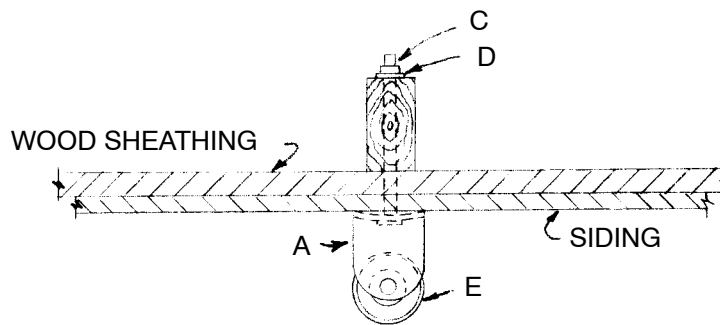
06 01 56 **

Sheet 1 of 1



06 01 56 01

Wood Siding, Brick Veneer
Or Composition Shingles



06 01 56 02

Wood Siding, Brick Veneer
Or Composition Shingles

(Normally used where stud is accessible from the inside.)

	Std. / Stk. No.	Description	06 01 56**	
A	23 06 040	Clevis, Secondary Insulator	01	02
@B	23 60 007	Screw, Lag, 1/2" x 4" or	1	
	23 60 011	Screw, Lag, 5/8" x 5"		
C	23 52 061	Bolt, Mach., 5/8" x 8"		1
D	23 66 027	Washer, Square, 5/8"		1
E	25 59 044	Insulator, Spool	1	1

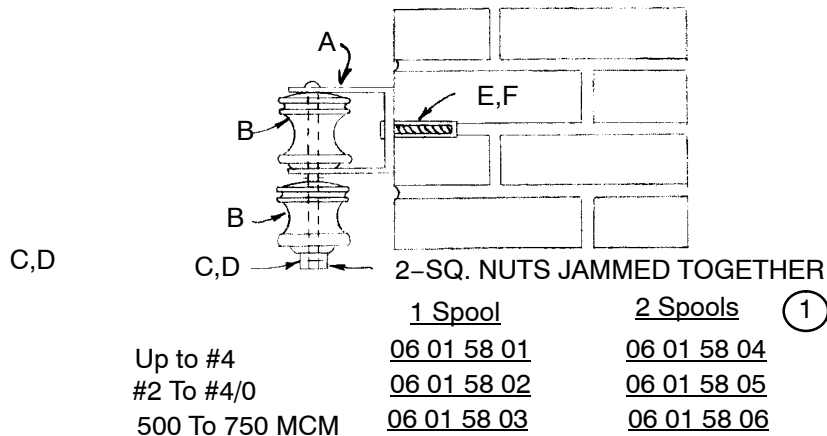
INSULATORS AND SUPPORTS

Service Attachment on Building

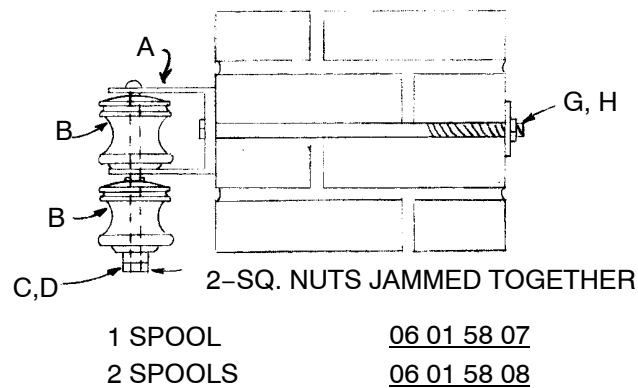
0 To 600 Volts

06 01 58 **

Sheet 1 of 1



Solid Masonry – Brick Or Cement



Solid Masonry – Brick Or Cement

(Use only when specified)

	Std. / Stk. No.	Description	06 01 58**	01	02	03	04	05	06	07	08
A	23 06 040	Clevis, Secondary Insulator		1	1	1	1	1	1	1	1
B	25 59 044	Insulator, Spool, 750 V.		1	1	1	2	2	2	1	2
C	23 52 061	Bolt, Mach., 5/8" x 8"					1	1	1		1
D	23 65 011	Nut, Square, 5/8"					1	1	1		1
E	21 51 016	Shield, Exp., 3/8"		1			1				
	21 51 018	Shield, Exp., 1/2"			1			1			
	21 51 019	Shield, Exp., 5/8"				1			1		
F	23 52 194	Bolt, Mach., 3/8" x 3"		1			1				
	23 52 034	Bolt, Mach., 1/2" x 4"			1			1			
	23 52 200	Bolt, Mach., 5/8" x 4"				1			1		
G	23 52 066	Bolt, Mach., 5/8" x 14"								1	1
H	23 66 027	Washer, Square, 5/8"								1	1

1. The double spool insulator is to be used only for attaching network cable to buildings excluding deadend constructions.

DISTRIBUTION
CONSTRUCTION STANDARDS



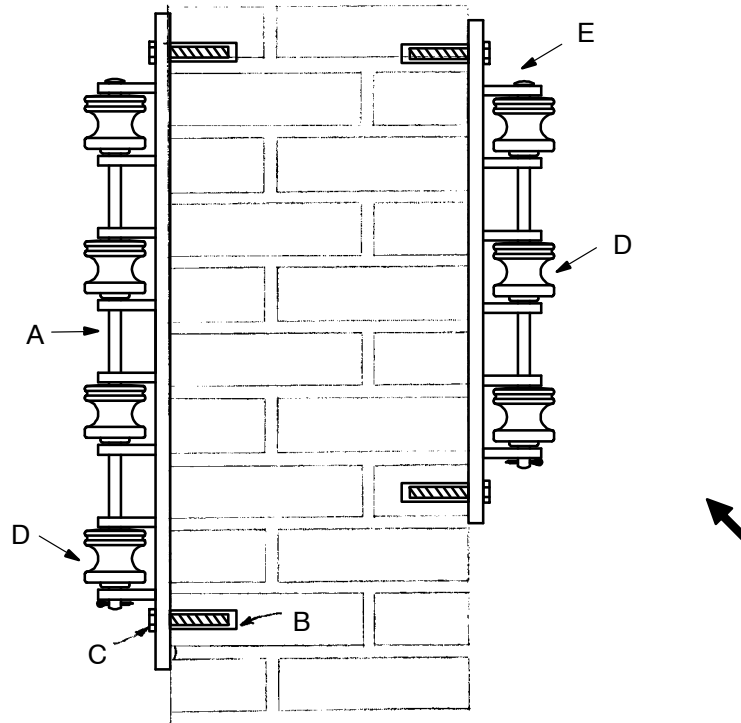
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REV. NO: 1
REV. DATE: 9/18/00
REAFFIRMED DATE: 10/24/11

INSULATORS AND SUPPORTS

Service Attachment on Building

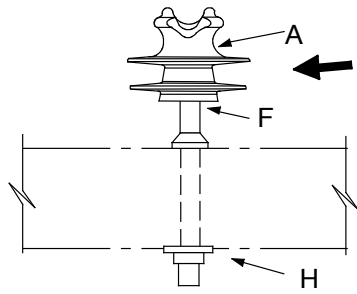
0 To 600 Volts

➔ **06 01 60 ****
Sheet 1 of 1

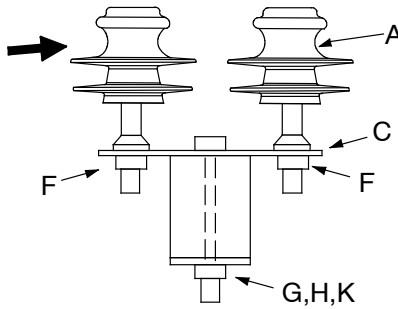


06 01 60 01, 4 Wire 06 01 60 02, 3 Wire
Solid Masonry – Brick Or Cement
(For fastening conductors up to 750 kcmil along walls)

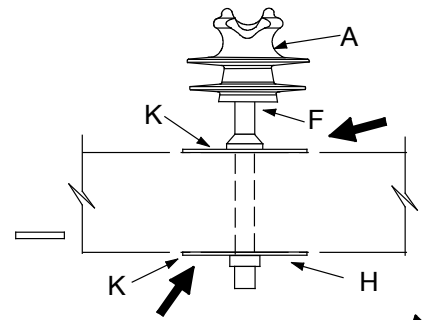
	Std. / Stk. No.	Description	06 01 60	01	02
A	23 11 004	Secondary Rack, 4 Wire		1	
B	21 51 016	Shield Expansion, 3/8"		2	2
C	23 52 194	3/8" x 3" Machine Bolt		2	2
D	25 59 044	Insulator, Spool		4	3
E	23 11 001	Secondary Rack, 3 Wire			1



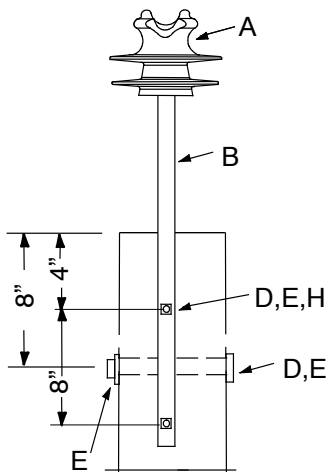
06 12 01 01
Sgl Pin and Insulator - Wood Arm



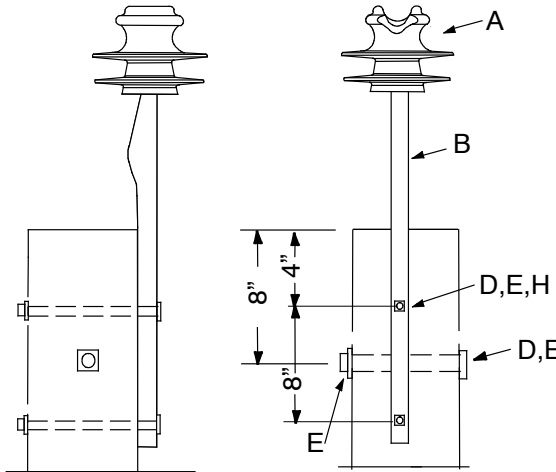
06 12 01 11
Dbl Pin and Insulator - FG Arm



06 12 01 12
Sgl Pin and Insulator-FG Arm



06 12 01 02
24" Sgl Pole Top Pin & Ins.

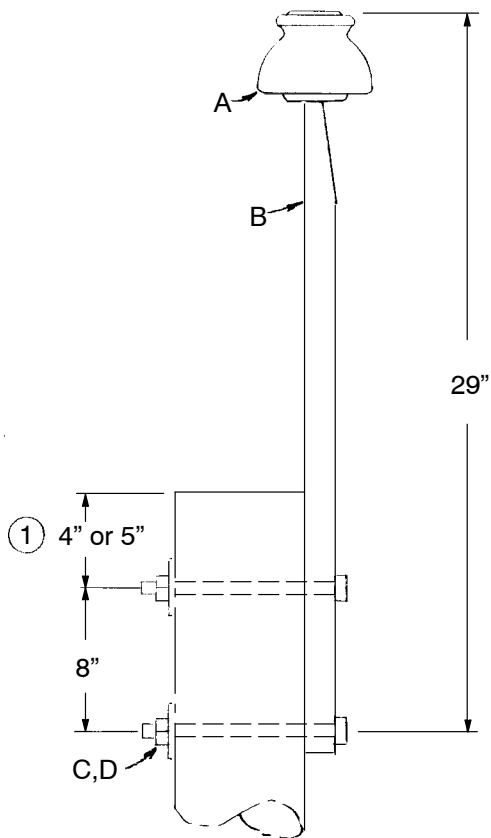


06 12 01 13
24" Dbl Pole Top Pin & Ins.

Notes:

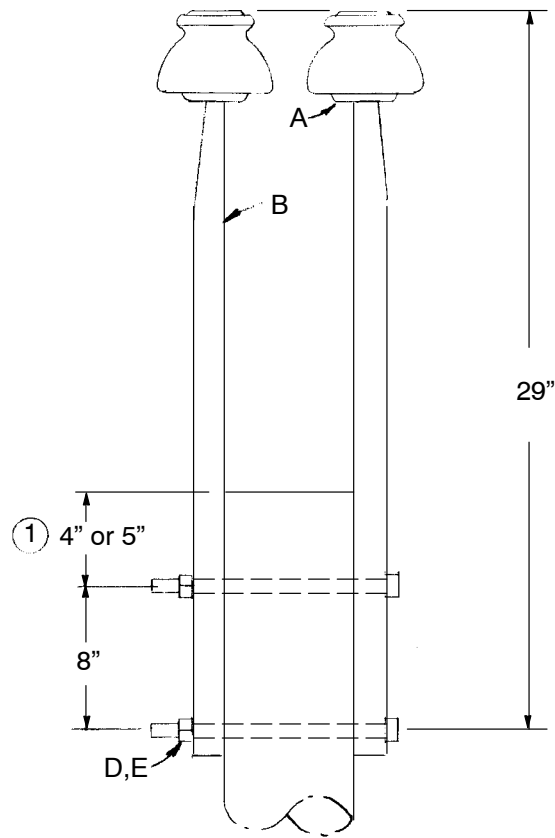
1. The 2" washer received with the pin should be used after the 4" washer to eliminate the coil washer from sliding inside the 4" washer.

		Std. / Stk. No.	Description	06 12 01 **	XA			Pole Top	
					01	11	12	02	13
	A	25 05 069	Insulator, Pin Type		1	2	1	1	2
	B	23 62 156	Pin, Pole Top, 24"					1	2
	C	23 77 212	Plate, Dbl Pin			1			
	D	23 52 065	Bolt, Mach., 5/8" x 12"					3	3
	E	23 66 031	Washer, Curved, 3/4"					4	2
	F	23 62 028	Pin, Insulator, Long Shank		1		1		
		23 62 136	Pin, Insulator, Short Shank			2			
	G	23 52 318	Bolt, Mach., 5/8" x 6"			1			
	H	23 66 134	Washer, Lock, Galvanized, 5/8" dbl coil type		1	1		3	3
	K	23 66 132	Washer, Flat, Sq., 4" x 4", w13/16" hole			1	2		



06 12 03 01

30" Pole Top & Insulator



06 12 03 02

30" Double Pole Top & Insulator

NOTES:

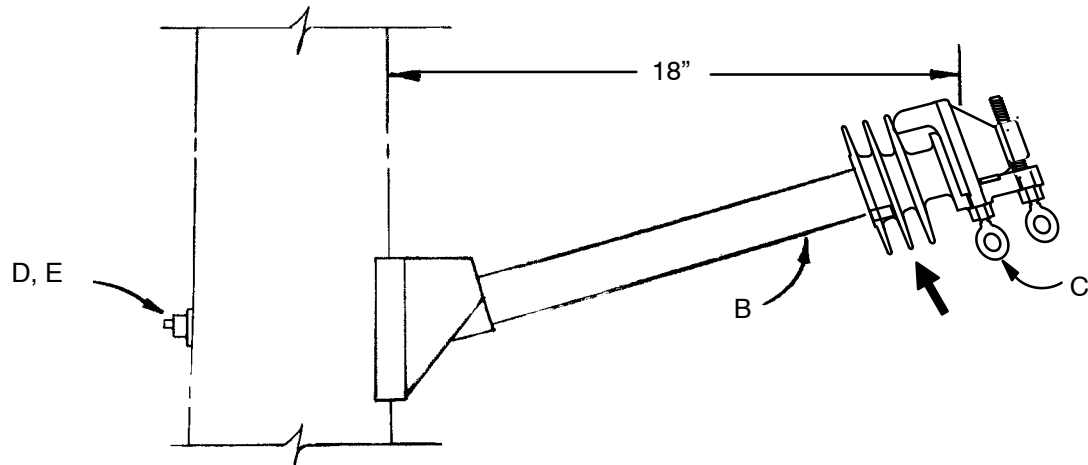
1. This dimension will vary according to pole top drilling.

	Std. / Stk. No.	Description	06 12 03 **	01	02
A	25 05 069	Insulator, Pin Type		1	2
B	23 62 115	Pin, Pole Top, 30"		1	2
C	23 52 063	Bolt , Mach., 5/8" x 10"		2	2
D	23 66 027	Washer Square 5/8"		2	

INSULATORS AND SUPPORTS
Arm – Training, Fiberglass
15 kV

06 12 20 04

Sheet 1 of 1



		Std. / Stk. No.	Description	06 12 20 04	
	B	23 12 123	Bracket, FG, Standoff, LD, 18"		1
	C	25 05 143	Insulator, Vise-Top, 15kV		1
	D	23 52 065	Bolt, Mach., 5/8" x 12"		1
	E	23 66 027	Washer, Square, 5/8"		1

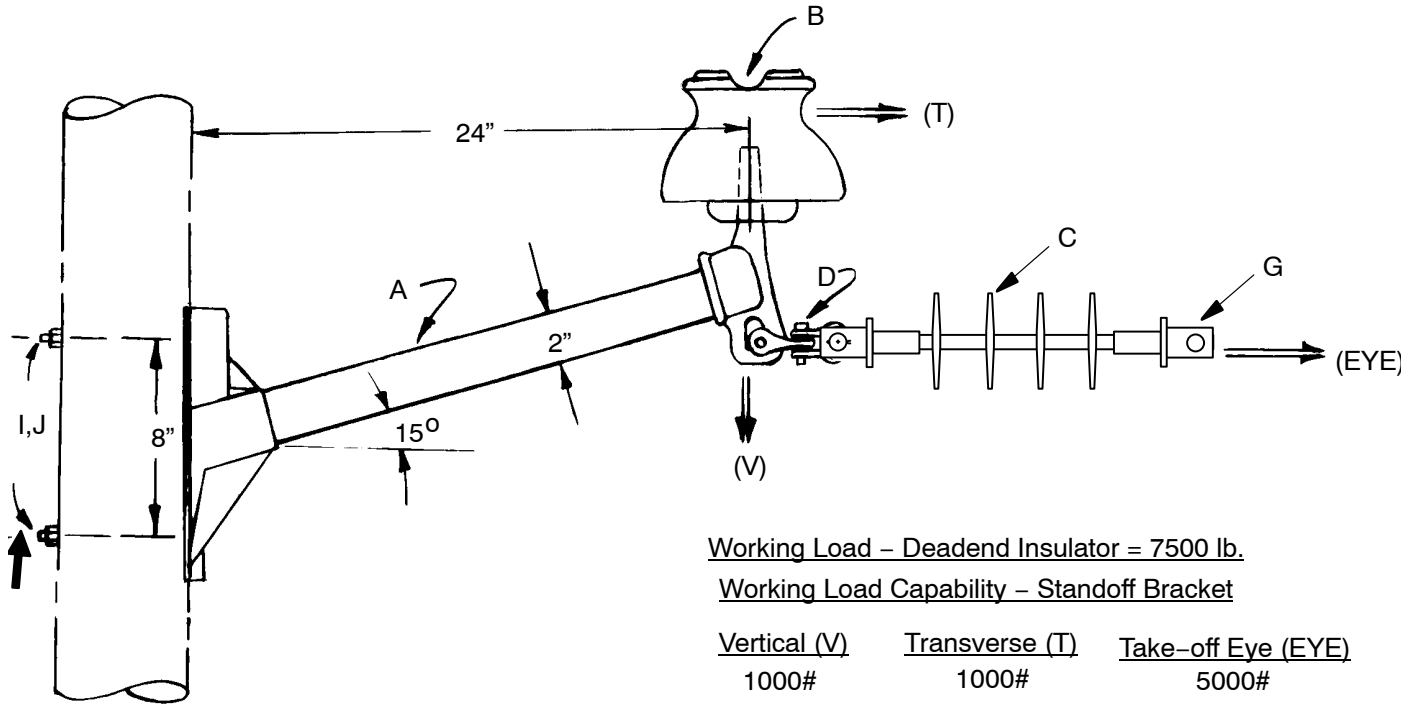
INSULATORS AND SUPPORTS

Assembly – Fiberglass Standoff

12 kV ←

06 12 21 **

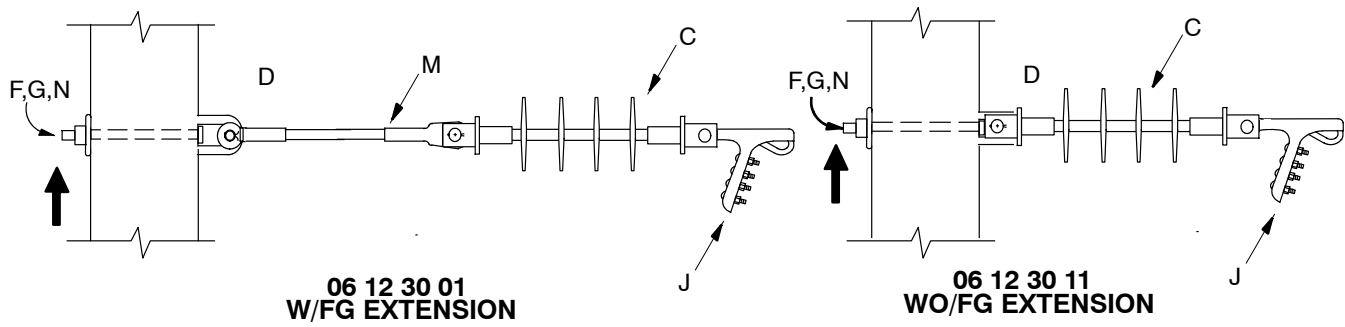
Sheet 1 of 1



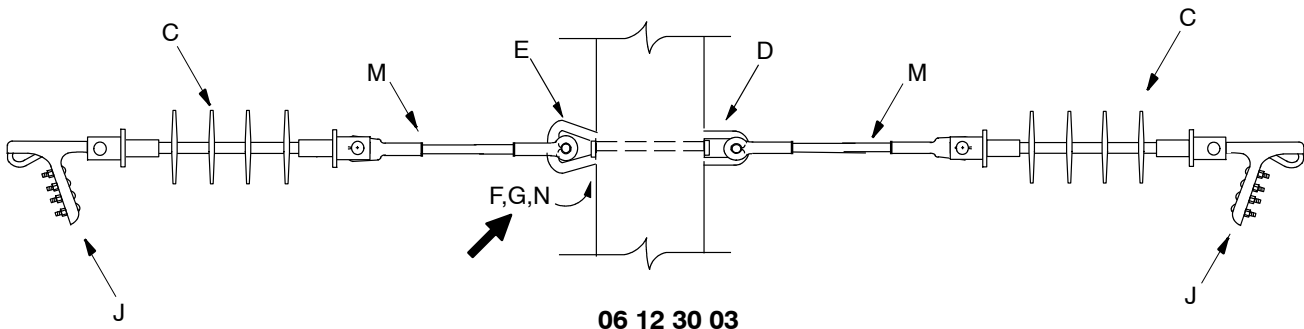
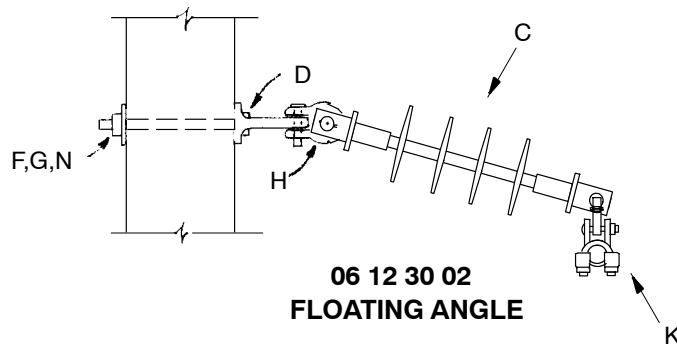
Fiberglass Standoff Assembly
with Full Tension Take-off Capability

- 06-12-21-04 Single Insulator Only
- 06-12-21-05 Single Insulator & Deadend
- 06-12-21-06 Single Deadend Only

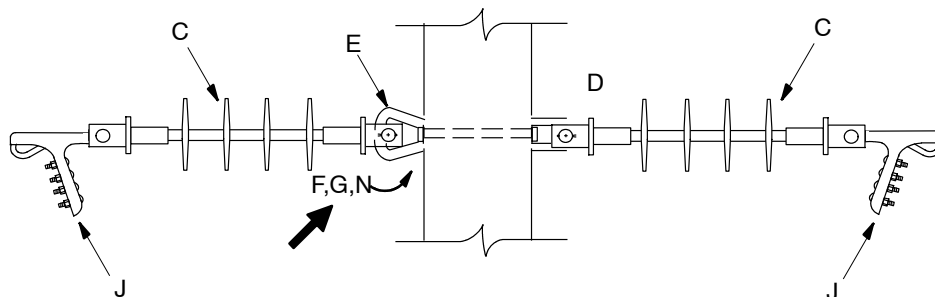
		Std. / Stk. No.	Description	06 12 21 **	12kV		
					04	05	06
@	A	23 06 085	Bracket, Standoff, 24" Fiberglass		1	1	1
	B	25 05 069	Insulator – Pin, 12kV		1	1	
	C	25 06 052	Insulator – Deadend, 12kV			1	1
	D	23 68 181	Shackle – Deadend			2	2
	G	DEC*W	Deadend Clamp			1	1
	I	23 52 065	Bolt, Mach, 5/8" x 12"		2	2	2
	J	23 66 027	Washer, Square, 5/8"		2	2	2



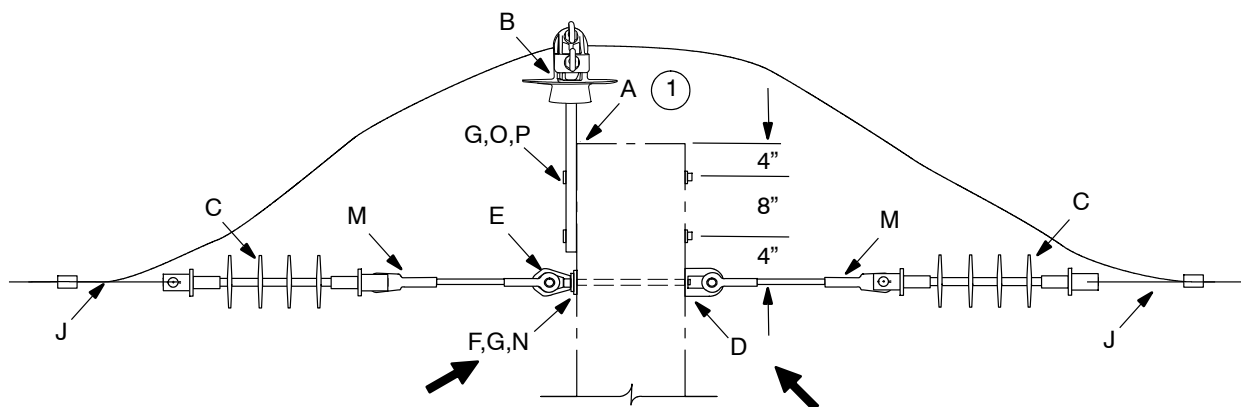
STRAIGHT DEADEND



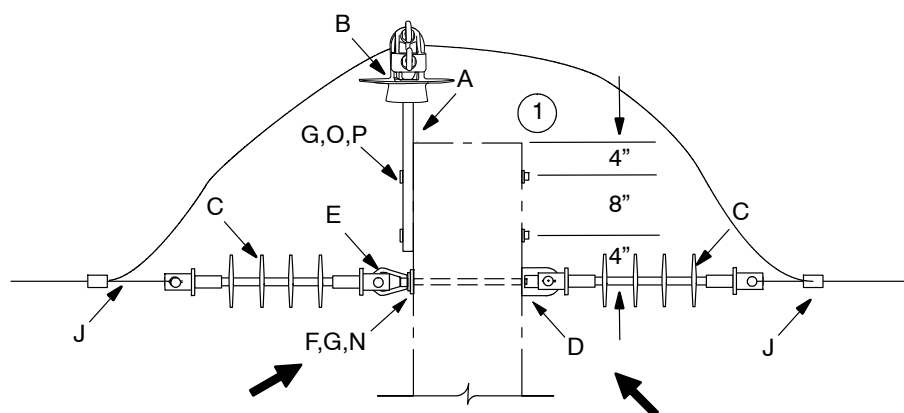
DOUBLE DEADEND W/FG EXTENSIONS



DOUBLE DEADEND WO/FG EXTENSIONS



06 12 30 04
W/FG Extension



06 12 30 14
WO/FG Extension
POLE TOP LOOPOVER

NOTES:

- For jumper support applications, hand tighten only and do not twist the eye off.

	Std. / Stk. No.	Description	06 12 30 **	01	02	03	04	11	13	14
	A 23 62 156	Pin, Pole Top					1			1
	B 25 05 143	Insulator, Vise- Top, 15kV					1			1
	C 25 06 052	Insulator, Suspension, 15kV		1	1	2	2	1	2	2
	D 23 59 095	Eyelet, 3/4"		1	1	1	1	1	1	1
	E 23 65 018	Eyenuit, 3/4"				1	1		1	1
	F 23 52 097	Bolt, Mach., 3/4" x 12"		1	1	1	1	1	1	1
	G 23 66 031	Washer, Curved , 3/4"		1	1	1	3	1	1	3
	H 23 68 181	Shackle, Deadend			1					
@	J DEC*W	Conductor Deadend clamp		1		2	2	1	2	2
@	K SC*W	Suspension Clamp			1					
	M 25 56 076	Insulator, Guy Strain, F/G, 26", 15k UTS		1		2	2			
	N 23 65 042	Nut, Lock, Square, Galv, 3/4"		1	1	1	1	1	1	1
	O 23 52 065	Bolt, Mach., 5/8" X 12"					2			2
	P 23 66 134	Washer, Lock, Galvanized, 5/8", Dbl Coil Type					2			2

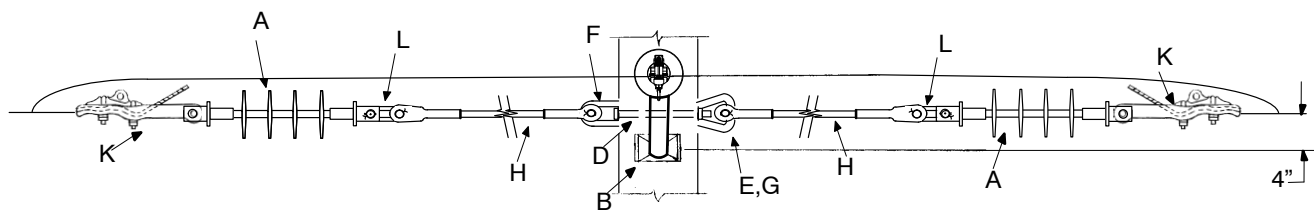
INSULATORS AND SUPPORTS

Deadends on Pole – Double

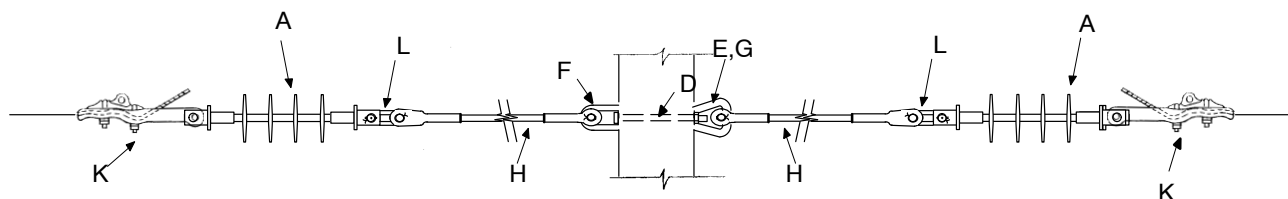
12 kV

06 12 33 **

Sheet 1 of 1

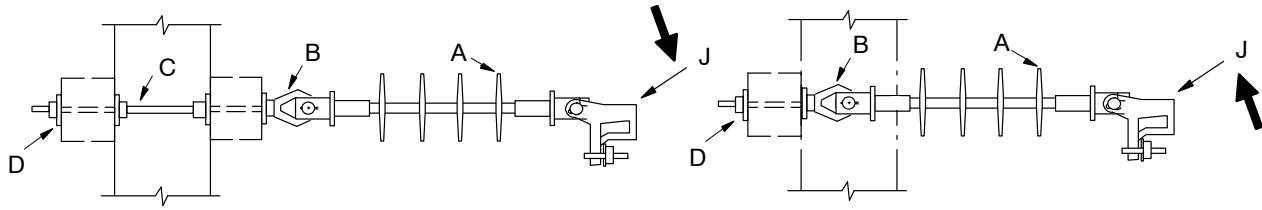


06 12 33 01
LOOPAROUND



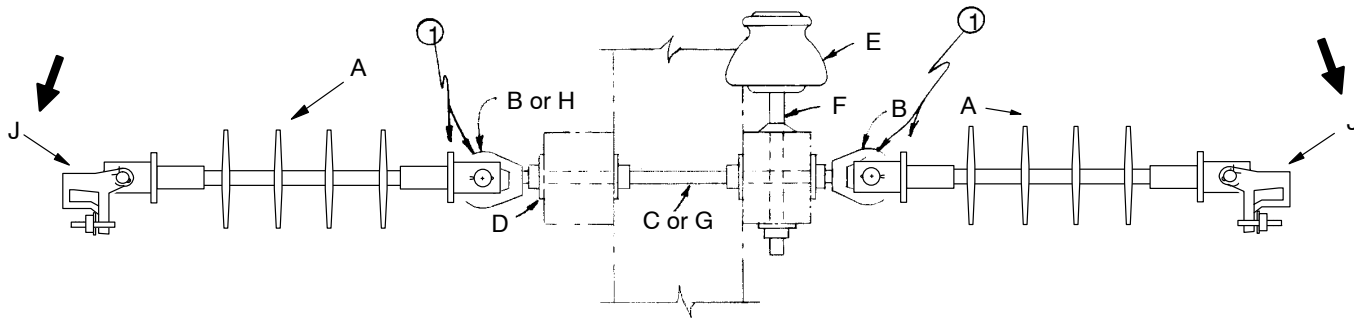
06 12 33 02
DOUBLE DEADEND WITH EXTENSIONS

		Std. / Stk. No.	Description	06 12 33 **	01	02
@	A	25 06 052	Ins., Suspension, 15 kV		2	2
	B	06 12 20 04	Brkt, FG, Standoff, LD, 18", w Vice-Top Insulator		1	
	D	23 52 097	Bolt, Mach., 3/4" X 12"		1	1
	E	23 66 031	Washer, Square, 3/4"		1	1
	F	23 59 095	Eyelet, 3/4"		1	1
	G	23 65 018	Eyenuit, 3/4"		1	1
@	H	25 56 076	Ins, Guy Strain, F/G, 26", 15 K UTS		2	2
	K	DE C*W	Clamp, Conductor, Deadend		2	2
	L	23 68 249	Link, Chain, Oval, 1"x2-1/4"		2	2



06 12 34 01
DEADEND ON CROSSARMS

06 12 34 07
DEADEND ON SINGLE CROSSARM



Dble. Arm 06 12 34 02
Sgl. Arm 06 12 34 03

LOOPOVER

06 12 34 04 ①
06 12 34 05
06 12 34 06

DOUBLE DEADEND

Notes:

1. Double deadend w/extension 06-12-34-04 install Item (K) between Items A & B.
2. Working load of deadend insulator = 7500 lb.

		Std. / Stk. No.	Description	06 12 34 **	01	02	03	04	05	06	07
@	A	25 06 052	Ins., Suspension, 12 kV		1	2	2	2	2	2	1
	B	23 65 012	Eyenuit, 5/8"		1	2	1	2	2	1	
	C	23 53 002	Bolt - D.A. 5/8" x 16"		1	1		1	1		
	D	23 66 027	Washer - Square 2-1/4"		4	4	2	4	4	2	2
	E	25 05 069	Ins., Pin Type			1	1				
	F	23 62 028	Pin, Insulator, X arm			1	1				
	G	23 52 058	Bolt - Machine 5/8" x 5"				1			1	
	H	23 59 005	Eyelet, 5/8"				1			1	1
	J	DEC*W	Clamp, Deadend		1	2	2	2	2	2	1
	K	23 59 042	Link, Extension, 6" Clevis-Eye					2			

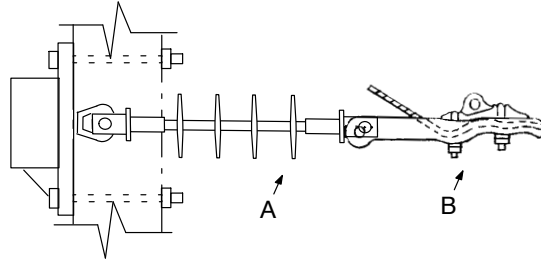
INSULATORS AND SUPPORTS

Deadends on Fiberglass Arm

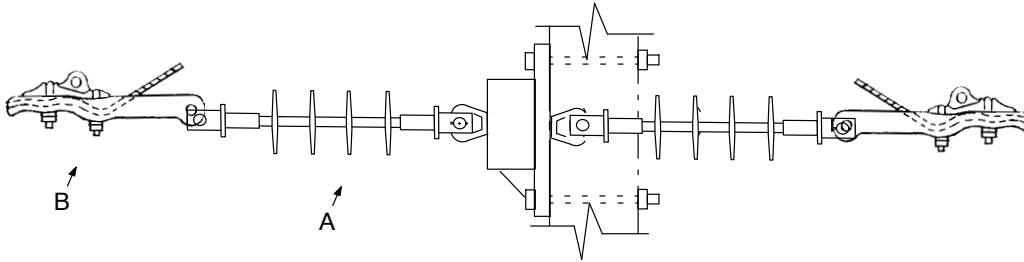
12 kV

06 12 35 **

Sheet 1 of 1



06 12 35 01 Single Deadend on FG Arm

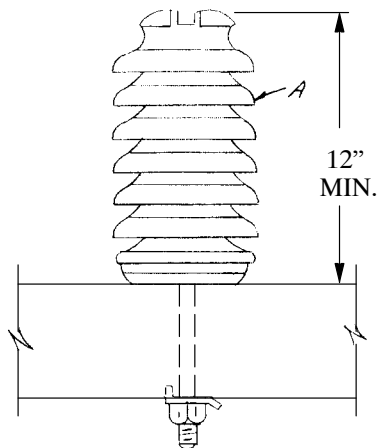


06 12 35 02 Double Deadend on FG Arm

Notes:

1. Double deadend w/extension install if required.
2. Working load of deadend insulator = 7500 lb.

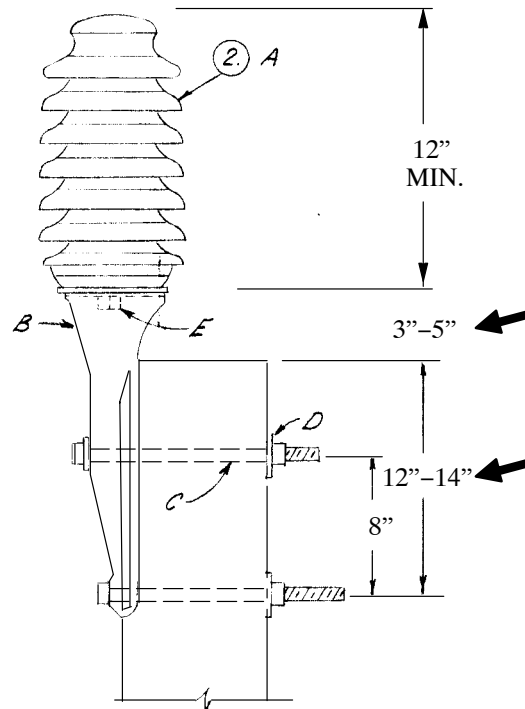
		Std. / Stk. No.	Description	06 12 35 **	01	02
1 @	A	25 06 052	Ins., Suspension, 12 kV		1	2
	B	DEC*W	Clamp, Deadend DCS 07 00 11 00		1	2
	C	25 56 076	Insulator, Guy Strain FG 26"			



34 kV 06 34 01 02

69 kV 06 34 01 04

Cross Arm Mounting



Pole Top Mounting

34 kV 06 34 01 05

69 kV 06 34 01 07

NOTES:

1. In 34kV industrial atmosphere where experience shows possible problems, use 69kV installation.
2. On angle poles install insulator on side of pole that pulls bracket against pole.

		Std. / Stk. No.	Description	06 34 01 **	02	04	05	07
					X-Arm		Pole Top	
A		25 05 064	Ins., L.P., 34kV, F Neck		1		1	
		25 05 098	Ins., L.P., 69kV, N Neck			1		1
B		23 06 021	Bracket, Pole Top				1	1
C		23 52 063	Bolt, Mach., 5/8" x 10"				2	2
D		23 66 027	Washer, Square, 5/8"				2	2
E		23 64 008	Stud, 3/4" x 1-3/4"				1	1

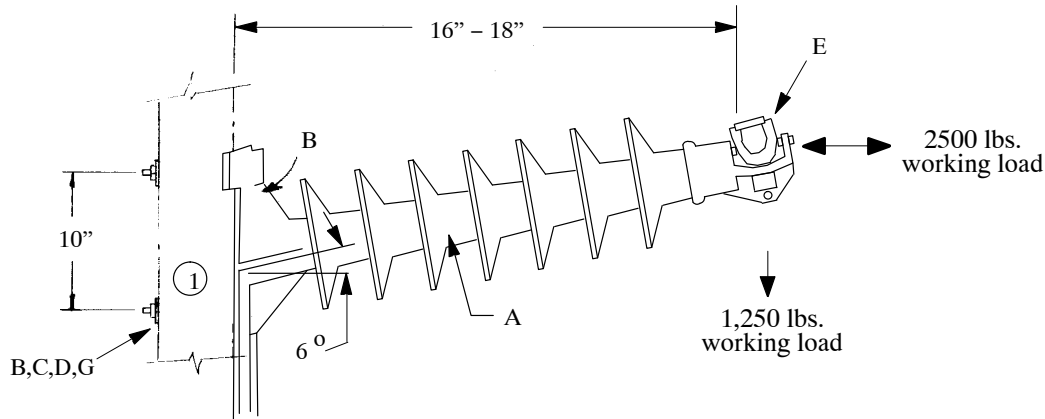
INSULATORS AND SUPPORTS

Horizontal Post Insulators

34 kV

06 34 03 **

Sheet 1 of 1



34 kV Horizontal Line Post, Polymer, Tangent/Angle, Single Insulator
 34 kV Horizontal Line Post, Polymer, Tangent/Angle, Double Insulator

06 34 03 03
 06 34 03 06

NOTES:

- Reverse bolt position if guy wire is attached to bottom bolt.

		Std. / Stk. No.	Description	06 34 03**	03	06
@	A	25 05 145	Ins., 34 kV, Hor. Line Post, Clamp Top		1	2
	B	23 52 219	Bolt, Mach., 3/4" x 14" (*)		2	
@		23 52 254	Bolt, Mach., 3/4" x 16" (*)		2	
	C	23 53 058	Bolt, DA, 3/4" x 16" (*)			2
@		23 53 059	Bolt, DA, 3/4" x 18" (*)			2
	D	23 66 031	Washer, Square, 3/4" Bolt, 3"x3", Galvanized		2	
	E	TC*W	Clamp, Trunnion		1	2
	G	23 66 135	Washer, Lock, 3/4" Dbl Coil Type		2	4

* Machine Bolts are furnished with 1 square nut and DA bolts are furnished with 4 square nuts.

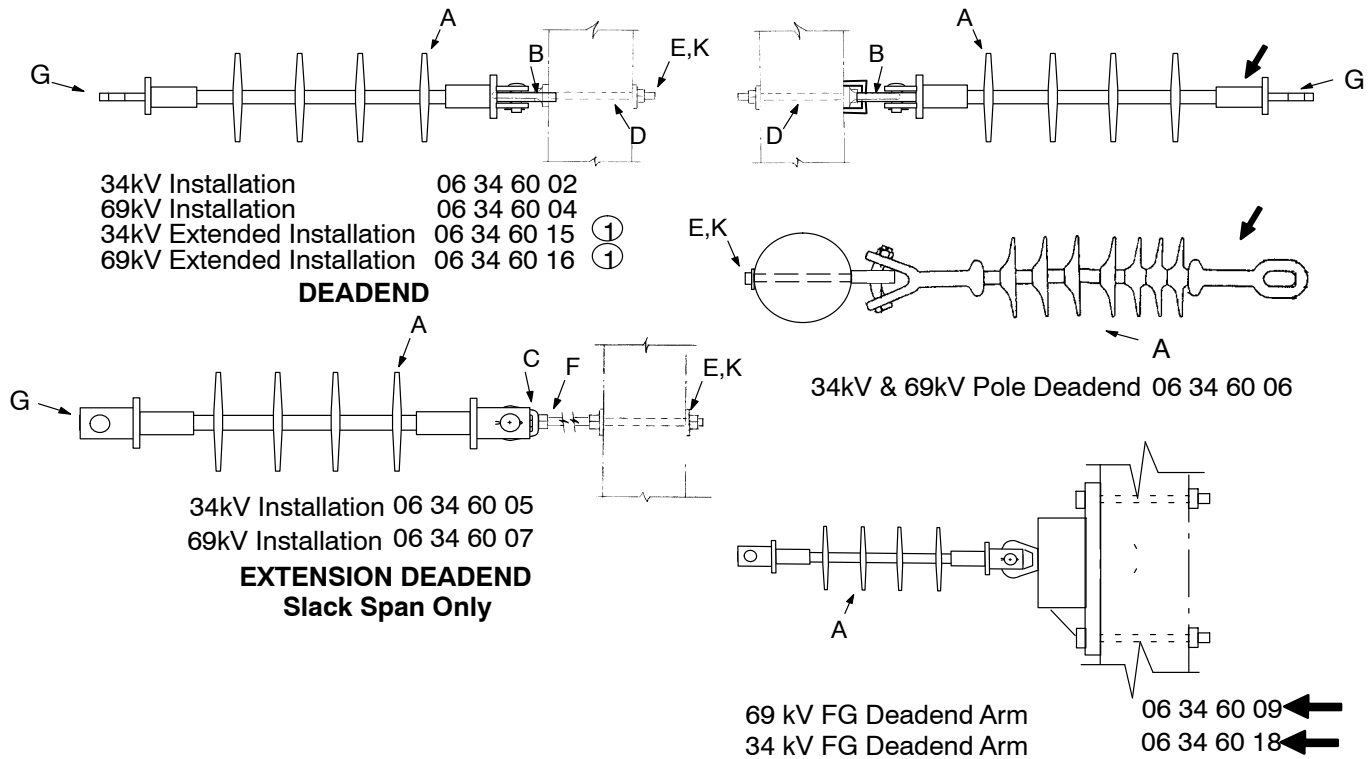
INSULATORS AND SUPPORTS

Floating Angle and Deadends

34 and 69 kV

06 34 60 **

Sheet 1 of 2



NOTES:

- On extended installations (other than slack span) install fiberglass strain insulator between eyelet and deadend insulator.

		Std/Stk No.	Description	06 34 60 **	Deadend								Ext. D.E.	
					02	04	06	09	15	16	18	05	07	
@	A	25 06 053	Insulator, 34 kV, Deadend		1				1		1	1		
		25 06 079	Insulator, 69 kV, Susp. (Oval Eye–Oval Eye)			1				1			1	
		25 06 113	Insulator, 69 kV Susp., 69kV, (Wye Clevis–Oval Eye)				1	1						
	B	23 59 005	Eyelet, 5/8”		1	1				1	1			
		23 59 095	Eyelet, 3/4”				1							
	C	23 65 012	Eyenuit, 5/8”									1	1	
	D	23 52 066	Bolt, Mach., 5/8” x 14”		1	1				1	1			
		23 52 219	Bolt, Mach., 3/4” x 14”				1							
	E	23 66 027	Washer, Square, 5/8” 2–1/4” x 2–1/4”		1	1				1	1		2	2
		23 66 131	Washer, Square, 3/4” , 2–1/4” x 2–1/4”				1							
	F	23 53 044	Bolt, D.A., 5/8” x 32”										1	1
	G	DEC*W	Clamp, Conductor Deadend		1	1	1	1	1	1	1	1	1	1
H	23 68 181	Shackle, Anchor			1					1			1	
I	25 56 076	Insulator, Strain, FG, 15K x 26” Section Length							1	1				
K	23 66 134	Washer, Lock, 5/8”, Dbl Coil Type		1	1				1	1		1	1	

NOTES:

**DISTRIBUTION
CONSTRUCTION STANDARDS**



ENG: DCG
REV. NO: 6
REV. DATE: 10/12/11

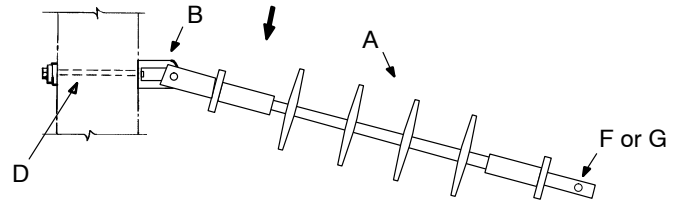
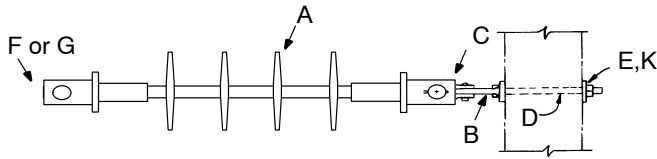
INSULATORS AND SUPPORTS

Floating Angle and Deadends

34 and 69 kV

06 34 60 **

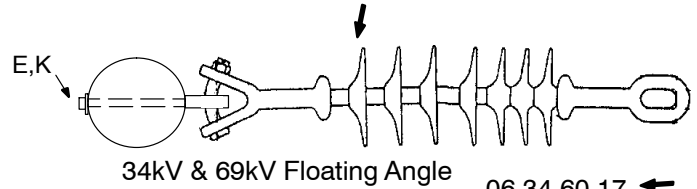
Sheet 2 of 2



34kV Floating Angle, Unguyed
69kV Floating Angle, Unguyed

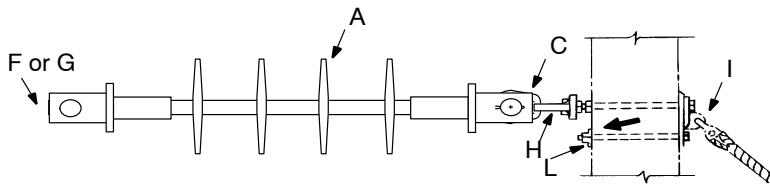
06 34 60 08
06 34 60 13

FLOATING ANGLE



34kV & 69kV Floating Angle

06 34 60 17



34kV Floating Angle, Guyed
34kV Deadend to Pole, Guyed
69kV Floating Angle, Guyed
69kV Deadend to Pole, Guyed

06 34 60 11
06 34 60 12
06 34 60 14
06 34 60 10

FLOATING ANGLE OR DEADEND - GUYED

1. Item A-7500lb. working load.

		Std. / Stk. No.	Description	06 34 60 **	08	10	11	12	13	14	17
@	A	25 06 053	Insulator, 34 kV, Deadend		1		1	1			
		25 06 079	Insulator, 69kV, Susp. (Oval Eye-Oval Eye)			1			1	1	
		25 06 113	Insulator, 69kV, Susp. (Wye Clevis-Oval Eye)								1
	B	23 59 005	Eyelet, 5/8"		1						
		23 59 095	Eyelet, 3/4"								1
	C	23 68 181	Shackle, Deadend		1	1	1		1	1	
	D	23 52 066	Bolt, Mach., 5/8" x 14"		1				1		
		23 52 219	Bolt, Mach., 3/4" x 14"								1
	E	23 66 027	Washer, Square, 5/8", 2-1/4" x 2-1/4"		1				1		
		23 66 131	Washer, Square, 3/4", 2-1/4" x 2-1/4"								1
	F	SC*W	Clamp, Suspension		1		1		1	1	1
	G	DEC*W	Clamp, Conductor Deadend			1		1			
	H	23 65 018	Eyenuit, 3/4"			1	1	1		1	
	I	11 00 56 02	Hook, Guy, Heavy Duty			1	1	1		1	
	K	23 66 134	Washer, Lock, 5/8" - Dbl Coil Type		1				1		
		23 66 135	Washer, Lock, 3/4" - Dbl Coil Type			1	1	1		1	1

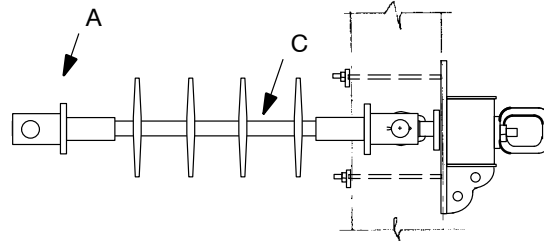
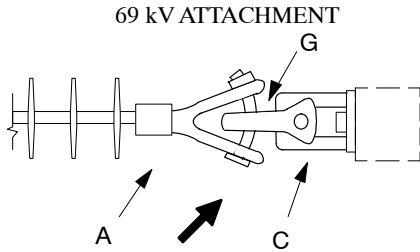
INSULATORS AND SUPPORTS

Crossarm Deadend

34 & 69 kV

06 34 66 **

Sheet 1 of 1



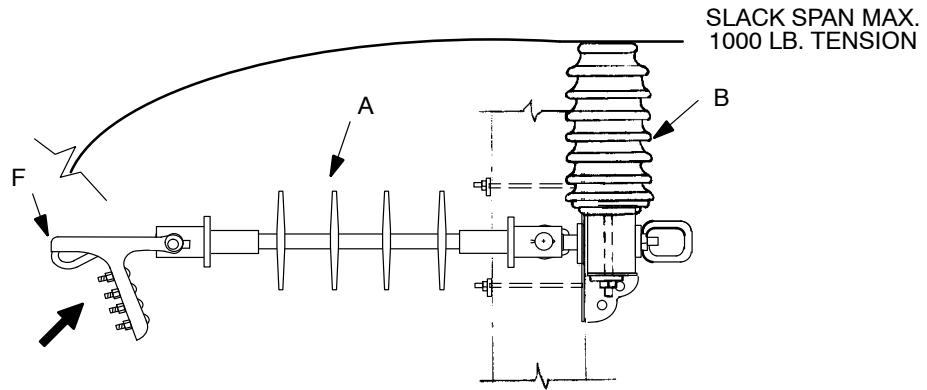
34 kV INSTALLATION

06 34 66 02

69 kV INSTALLATION

06 34 66 04

DEADEND ON CROSSARMS



34 kV INSTALLATION

06 34 66 05

69 kV INSTALLATION

06 34 66 07

ARM LOOPOVER SLACK SPAN

Note:

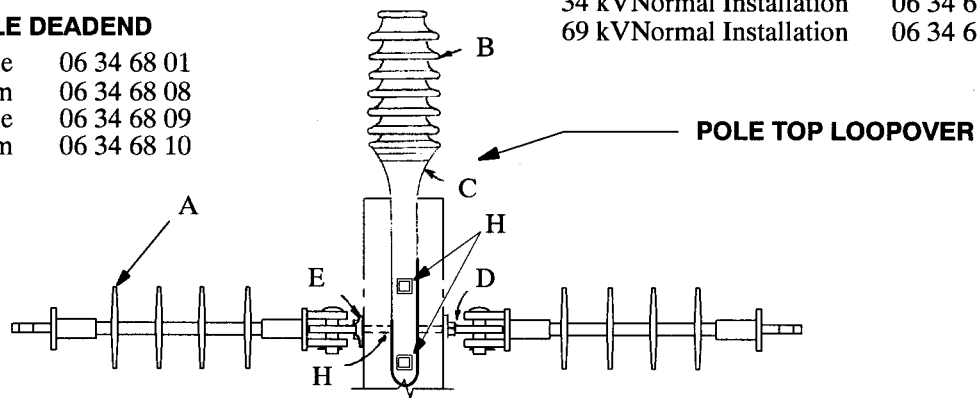
1. In 34kV industrial atmosphere where experience shows possible problems, use 69kV insulators.
2. Working load of 34 kV deadend insulator = 7,500 lbs.
Working load of 69 kV deadend insulator = 12,500 lbs.

		Std. / Stk. No.	Description	06 34 66 **	02	04	05	07
					D.E.		Slack	
→	A	25 06 113	Insulator, Susp., 69 kV, Polymer			1		1
		25 06 053	Insulator, Susp. 34 kV, Polymer	1			1	
	B	25 05 064	Ins., Line Post, 34 kV, F Neck				1	
		25 05 098	Ins., Line Post, Ind., 69 kV, N Neck					1
→@	F	DEC*W	Clamp, Deadend, Conductor	1	1	1	1	1
	G	23 68 181	Shackle, Deadend			1		1

DOUBLE DEADEND

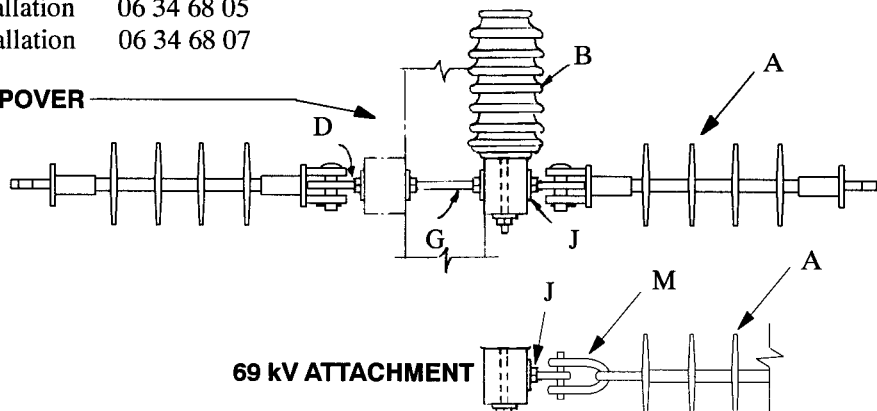
34 kV Pole	06 34 68 01
34 kV Arm	06 34 68 08
69 kV Pole	06 34 68 09
69 kV Arm	06 34 68 10

34 kV Normal Installation	06 34 68 02
69 kV Normal Installation	06 34 68 04



34 kV Normal Installation	06 34 68 05
69 kV Normal Installation	06 34 68 07

ARM LOOPOVER



Note:

1. In 34kV industrial atmosphere where experience shows possible problems, use 69kV installation.
2. To extend from pole or crossarm, insert strain insulator (25 56 059) and eye-eye link (23 59 064).
3. Working load of suspension insulator = 7500 lb.
4. Only to be used for recloser bypass to mount disconnect switches.

		Std. / Stk. No.	Description	06 34 68 **	01	02	04	05	07	08	09	10
@	A	25 06 113	Insulator, Susp., 34 kV, Polymer		2	2		2		2		
		25 06 053	Insulator, Susp. 69 kV, Polymer				2		2		2	2
	B	25 05 064	Ins., Line Post, 34 kV, F Neck			1		1				
		25 05 098	Ins., Line Post, Ind., 69 kV, N Neck				1		1			
	C	23 06 021	Bracket, Pole Top			1	1					
	D	23 65 012	Eyenuit, Oval, 5/8"		1	1	1	2	2	2	2	2
	E	23 59 005	Eyelet, Standard, 5/8"		1	1	1				1	1
	G	23 53 003	Bolt, D.A., 5/8" x 10"		1	1	1				1	1
	H	23 52 063	Bolt, Mach., 5/8" x 18"					1	1	1	1	1
	J	23 66 027	Washer, Square, 5/8"		2	2	2	4	4	4	2	4
	K	23 64 008	Stud, 3/4" x 1-3/4"			1	1					
	L	DEC*W	Conductor Deadend Clamp		2	2	2	2	2	2	2	2
	M	23 68 181	Shackle Deadend				2		2		2	2

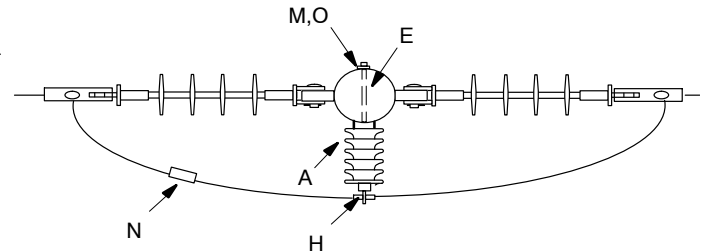
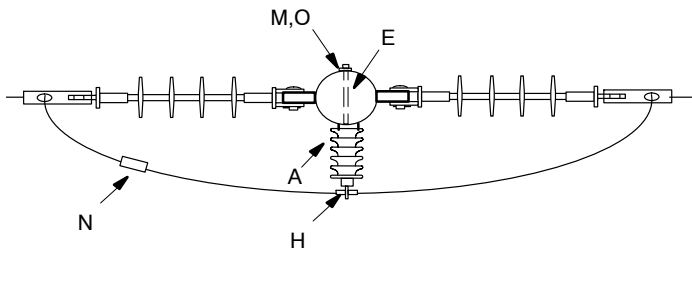
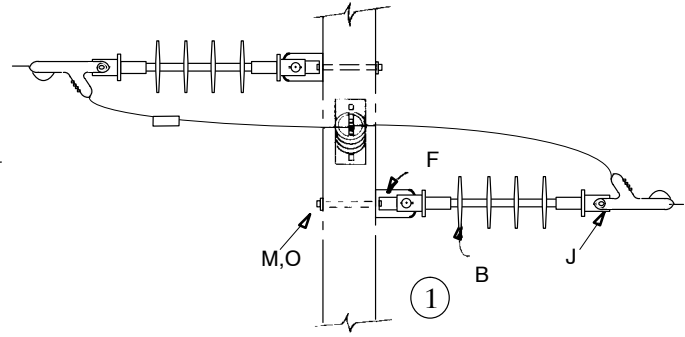
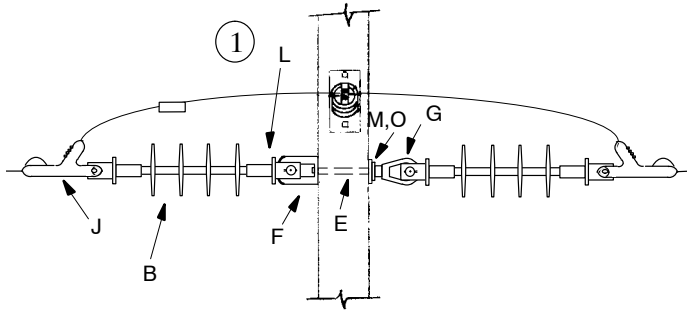
INSULATORS AND SUPPORTS

Double Deadend Loop

34 kV & 69 kV

06 34 72 **

Sheet 1 of 2



LOOPAROUND

06 34 72 01 69 kV
06 34 72 05 34 kV

LOOPAROUND

06 34 72 02 69 kV
06 34 72 06 34 kV

NOTE:

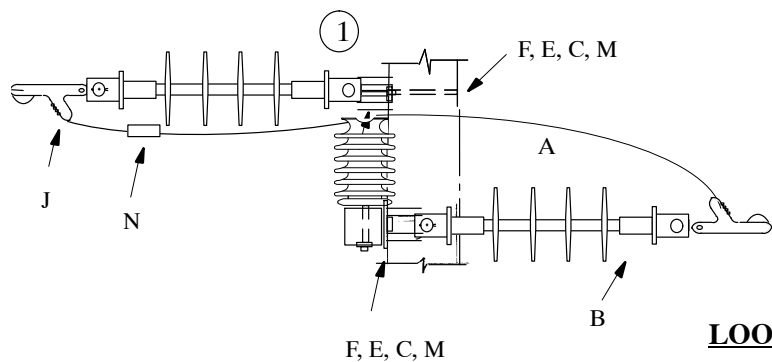
1. Use shackle to position deadend clamp properly if required.

		Std. / Stk. No.	Description	06 34 72**	69 kV		34 kV	
					01	02	05	06
@	A	25 05 095	Ins., 69 kV., Hor. Line Post, Clamp Top		1	1		
		25 05 145	Ins., 34.5 kV, Hor. Line Post, Clamp Top				1	1
	B	25 06 113	Ins., 69 kV, Susp., Wye Clevis – Oval Eye		2	2		
		25 06 053	Ins., 34.5 kV, Deadend, Clevis – Pad Eye				2	2
	E	23 52 097	Bolt, Machine 3/4" x 12"		3	4	3	4
	F	23 59 095	Eyelet, 3/4"		1	2	1	2
	G	23 65 018	Eyenuit, 3/4"		1		1	
	H	TCA*W	Clamp, Trunnion		1	1	1	1
	J	DEC*W	Clamp, Deadend		2	2	2	2
	M	23 66 031	Washer, Square, 3/4"		3	4	3	4
@	N	PG**	Clamp, Parallel Grove – (see DCS 07 00 25 00)		1	1	1	1
	O	23 65 042	Nut, Lock, Square, Galv, 3/4"		3	4	3	4

DISTRIBUTION
CONSTRUCTION STANDARDS



ENG: WYW
REV. NO: 7
REV. DATE: 09/04/14



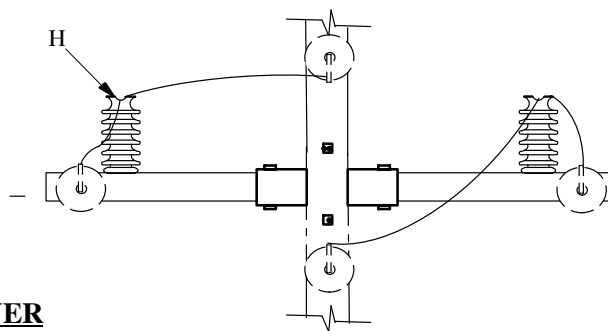
LOOPOVER

06 34 72 03

69 kV

06 34 72 07

34 kV



LOOPUNDER

06 34 72 04

69 kV

06 34 72 08

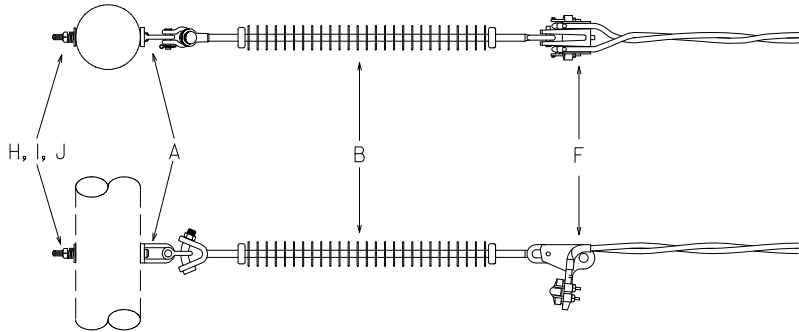
34 kV

NOTE:

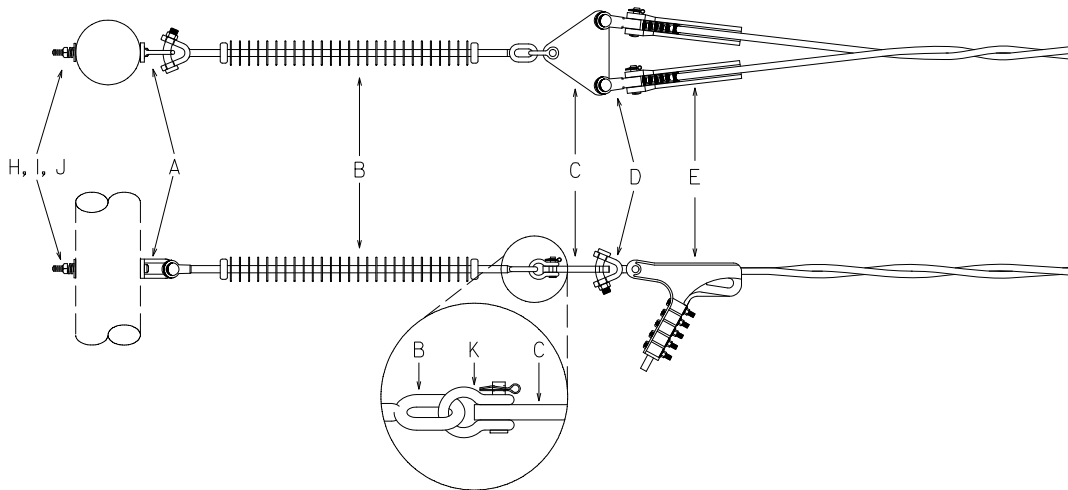
1. Use shackle to position deadend clamp properly if required.

		Std. / Stk. No.	Description	06 34 72**			
				03	04	07	08
@	A	06 34 01 04	Ins., 69 kV, Vertical, N-Neck, Tie Top, Xarm Mounted	2			
		06 34 01 02	Ins., 34 kV, Vertical, F-Neck, Tie Top, Xarm Mounted			2	
	B	25 06 113	Ins., 69 kV, Susp., Wye Clevis - Oval Eye	2	2		
		25 06 053	Ins., 34.5 kV, Deadend, Clevis - Pad Eye			2	2
	C	23 66 031	Washer, Square, 3/4"	2	2	2	2
	D	23 65 018	Eyenuit, 3/4"		2		2
	E	23 52 097	Bolt, Machine 3/4" x 12"	2	2	2	2
	F	23 59 095	Eyelet, 3/4"	2	2	2	2
@	H	TT*W	Tie, Top - Preformed (See DCS 007 00 41 00 for 34 kV)	2		2	
@		Hand Tie	Tie, Conductor (See DCS 07 00 41 00 for 69kV)				
@	J	DEC*W	Clamp, Deadend (see DCS 07 00 20 00)	2	2	2	2
	L	23 68 181	Shackle, Deadend	2	2	2	2
	M	23 65 042	Nut, Lock, Square, Galv. 3/4"	2	2	2	2
@	N	PG**	Clamp, Parallel Grove - (see DCS 07 00 25 00)	2	2	2	2

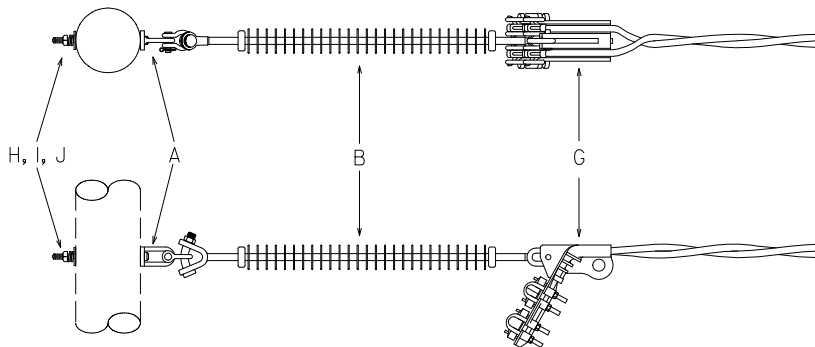
06 34 73 01



06 34 73 02



06 34 73 03



INSULATORS AND SUPPORTS
Primary Conductor and Fastenings
Deadend – 34kV & 69kV T2 4/0, 336, 556, & 954 Conductor

06 34 73 **

Sheet 2 of 2

	Std. / Stk. No.	Description	06 34 73 **	01	02	03
A	23 59 095	Eyelet, 3/4"		1	1	1
B	25 06 113	Insulator, Suspension, Wye–Clevis – Oval eye		1	1	1
C	23 67 388	Plate, Yoke, Triangular, 30k lbs. UTS		0	1	0
D	23 58 134	Wye–Clevis – Eye, 30k lbs. UTS		0	2	0
E	23 18 436	Clamp – Strain, Deadend 954 ACSR		0	2	0
F	23 18 404	Clamp – Strain, Deadend T2, 4/0 ACSR		1	0	0
G	23 18 406	Clamp – Strain, Deadend, T2, 336 ACSR, 556 AAC		0	0	1
H	23 52 219	Bolt, Mach., 3/4" x 14"		1	1	1
I	23 66 131	Washer, Square, 3/4", 2–1/4" x 2–1/4"		1	1	1
J	23 66 135	Washer, Lock, 3/4", Dbl Coil Type		1	1	1
K	23 68 181	Shackle, Deadend		0	1	0

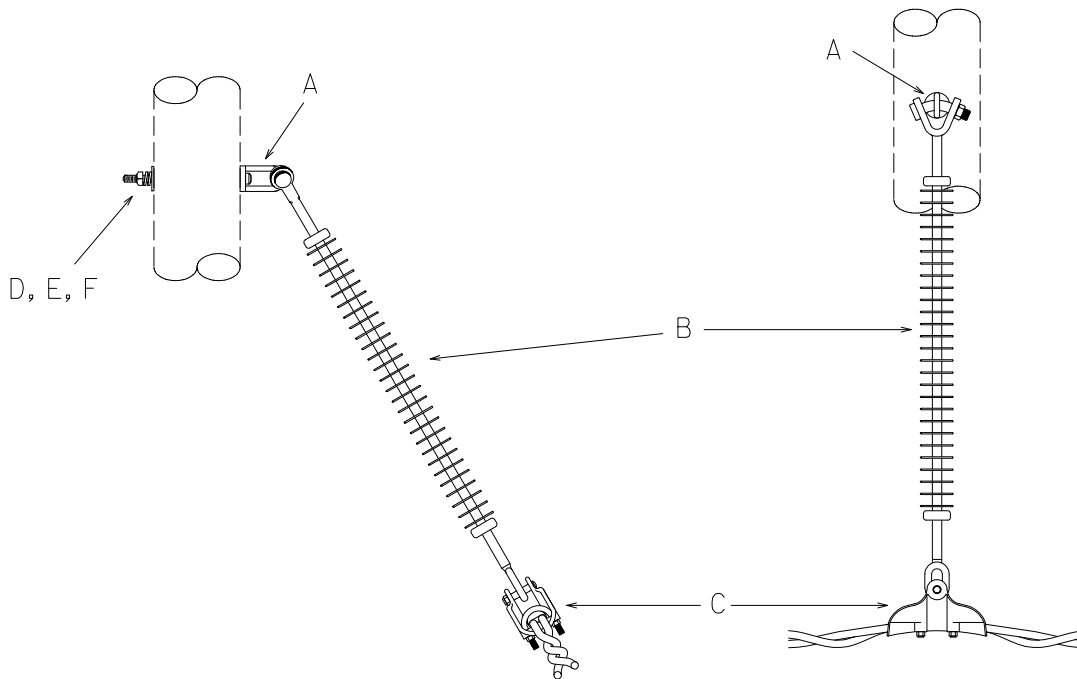
NOTES

1. Yoke plate not required for sizes other than 954.

INSULATORS AND SUPPORTS
Primary Conductor and Fastenings
Suspension – 34 & 69kV – T2, 4/0, 336, 556, 954

06 34 74 **

Sheet 1 of 1



		Std. / Stk. No.	Description	06 34 74 **	01	02	03	04
	A	23 59 095	Eyelet, 3/4"		1	1	1	1
	B	25 06 113	Insulator, Suspension, Wye-Clevis – Oval Eye		1	1	1	1
	C	23 78 455	Clamp, Suspension, T2, 4/0 ACSR		1			
		23 78 456	Clamp, Suspension, T2, 336 ACSR			1		
		17 02 176	Clamp, Suspension, T2, 556 AAC				1	
		23 78 451	Clamp, Suspension, T2, 954 ACSR					1
	D	23 52 219	Bolt, Mach., 3/4" x 14"		1	1	1	1
	E	23 66 131	Washer, Square, 3/4", 2-1/4" x 2-1/4"		1	1	1	1
	F	23 66 135	Washer, Lock, 3/4", Dbl. Coil Type		1	1	1	1

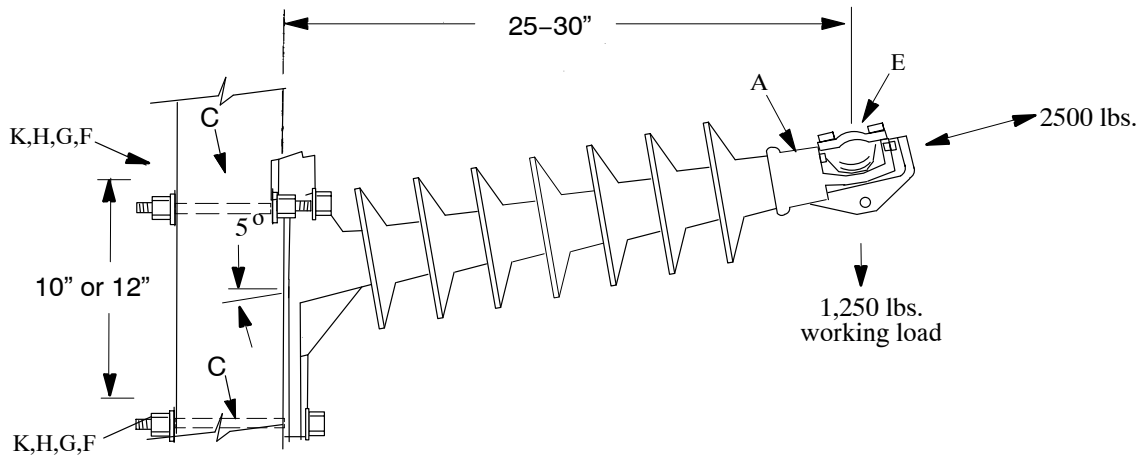
INSULATORS AND SUPPORTS

Horizontal Post Insulators

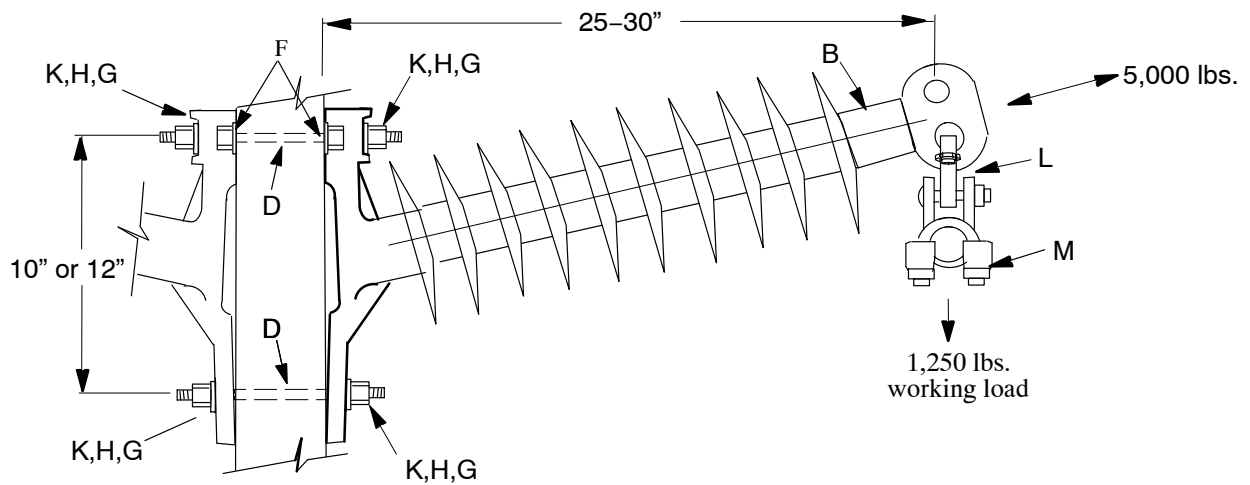
69 kV

06 69 03 **

Sheet 1 of 2



	<u>SINGLE</u>	<u>DOUBLE</u>
POLYMER INSULATOR W/TRUNNION CLAMP	06 69 03 03	06 69 03 04



	<u>SINGLE</u>	<u>DOUBLE</u>
POLYMER INSULATORS W/SUPENSION CLAMP	06 69 03 01	06 69 03 02

NOTES:

1. Reverse bolt position if guy wire is attached to bottom bolt.
2. Longer bolts are for use on larger diameter poles.

INSULATORS AND SUPPORTS
Horizontal Post Insulators
69 kV

06 69 03 **

Sheet 2 of 2

		Std. / Stk. No.	Description	06 69 03 **	01	02	03	04
	A	25 05 095	Insulator, Horiz. Post, 69 kV, Polymer, Trunnion Clamp				1	2
	B	25 05 184	Insulator, Horiz. Post, 69 kV, Polymer, Suspension Clamp	1	2			
@	C	23 52 219	Bolt, Mach., 3/4" x 14"	2		2		
		23 52 254	Bolt, Mach., 3/4" x 16"	2		2		
@	D	23 53 058	Bolt, DA, 3/4" x 16"		2		2	
		23 53 059	Bolt, DA, 3/4" x 18"		2		2	
@	E	TC*W	Clamp, Trunnion				1	2
	F	23 66 031	Washer, Square, for 3/4" Bolt, 3"x3", Galvanized	2		2		
	G	23 66 135	Washer, Lock, 3/4" Dbl Coil Type	2	4	2	4	
	H	23 15 001	Nut, Square, 3/4" x 10 TPI, Galvanized	*	*	*	*	
	K	23 65 042	Nut, Locking, 3/4", Galvanized	2	4	2	4	
	L	23 58 088	Wye Clevis-Eye, 11/16" hole, 5/8" Thick, 3/4" Pin Dia.	1	2			
@	M	SC*W	Clamp, Suspension	1	2			

* Furnished with DA bolts (4) or machine bolts (1).