

QUARTERLY MEETING, A POLE-SPLITTING-PREVENTION BOLT SHALL BE INSTALLED 6" FROM THE TOP OF THE POLE ON ALL CONSTRUCTION WOOD POLE ASSEMBLIES. BOLT LENGTHS WILL BE DEPENDENT ON POLE CLASS.

REV B DATE 12/13/2022 REVISION OR LOCKNUTS WAS AND LOCKNUTS, REMOVED QUOTES BY RWC CHK SSS APR MMG



CONSTRUCTION ASSEMBLY UNIT

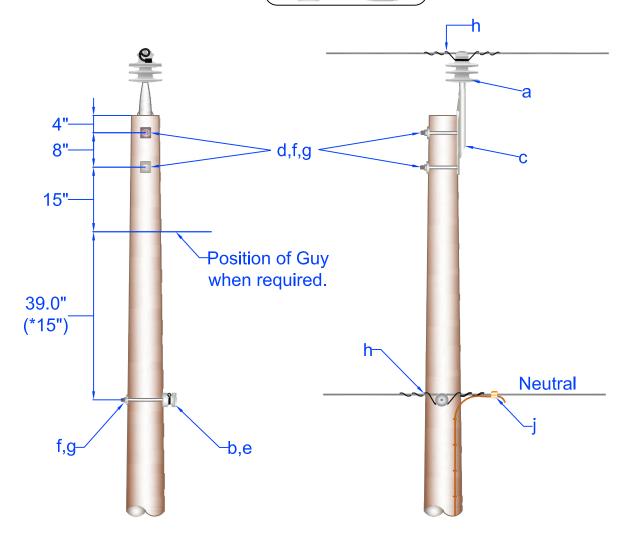
SPLIT-PREVENTION BOLTS FOR WOOD POLES

drawn:	approved:	date:	SPLIT
RWC	MMG	12/13/2022	PREVENTION

*Use this dimension when installing in existing line with the old 4' neutral spacing to prevent down strain on the adjacent poles neutral attachment.

Possible varieties of Primary Insulators (Stock #2000541)





Note: See design guidelines for additional information.

ltem	Material Number	Item Quantity	Item Description	ltem	Material Number	Item Quantity	Item Description
а	2000541	1	Insulator Pin Type CI 55-7	f	*3000153	3 (2)	Locknut 5/8" M F
b	2000544	1 (0)	Insulator Spool CI 53-2	g	*3000240	3 (2)	Washer Sq F 2 1/4
С	2000621	1	Pin Pole Top 20"- 1 3/8" Thd	h	*	As Req'd.	Primary and Neutral ties
d	*	2	Bolt Machine 5/8"	j	*	As Req'd.	Connectors
е	*	1 (0)	Bolt Upset Sgl 5/8"				

Specify A1N for unit A1 less neutral material Quantities shown in parenthesis are for A1N.

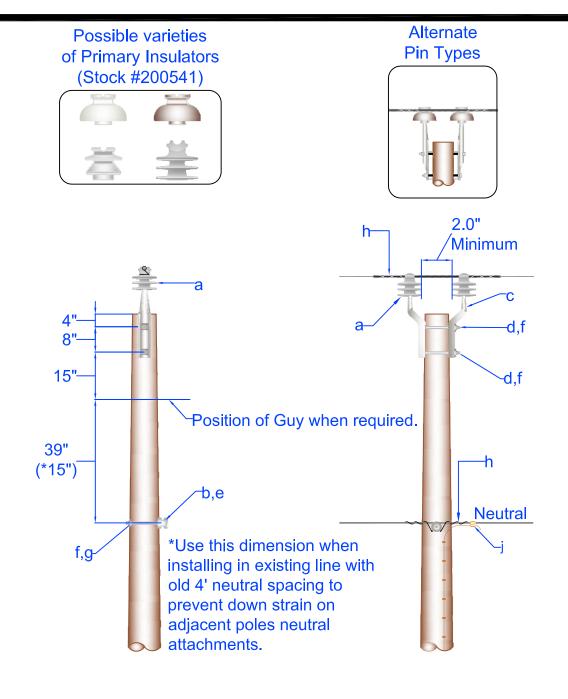
* Denotes "Grab Bag" item. All bolt lengths are dependent on pole class.



PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Φ Tangent to Small Angle, Single Primary Support, NESC Grade C Construction Only

drawn:	approved	date:	84/8481
JBS	MJB	December 12, 2011	A1/A1N



Item	Material Number	Item Quantity	Item Description	Item	Material Number	Item Quantity	Item Description
а	2000541	2	Insulator Pin Type CI 55-7	f	*3000153	3 (2)	Locknut 5/8" M F
b	2000544	1 (0)	Insulator Spool CI 53-2	g	*3000240	1 (0)	Washer Sq F 2 1/4
С	2000624	2	Pin Pole Top Offset 20"-1 3/8"	h	*	As Req'd.	Primary and Neutral ties
d	*	2	Bolt Machine 5/8"	j	*	As Req'd.	Connectors
е	*	1 (0)	Bolt Upset Sgl 5/8"				

Specify A1-1N for unit A1-1 less neutral material. Quantities shown in parenthesis are for A1-1N



PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Φ Tangent to Small angle, Double Primary Support Any Grade of Construction

drawn: approved		date:	
JBS	MJB	December 12, 2011	

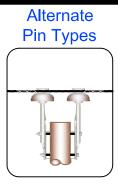
A1-1/A1-1N

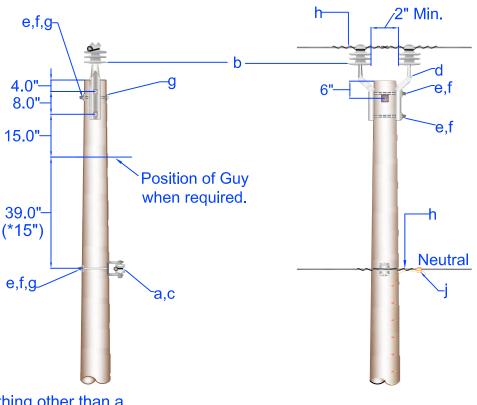
^{*} Denotes "Grab Bag" item. All bolt lengths are dependent on pole class.

*Use this dimension when installing in existing line with old 4' neutral spacing to prevent down strain on adjacent poles neutral attachments.

Possible varieties of Primary Insulators (Stock #2000541)







Note: If anything other than a 1:1 guy height to lead length ratio is used individual calculations are required.

Note: See design guidelines for additional information.

Item	Material Number	Item Quantity	Item Description	Item	Material Number	Item Quantity	Item Description	
а	2000148	1 (0)	Bracket DA Clevis	f	*3000153	4 (3)	Locknut 5/8" M F	
b	2000541	2	Insulator Pin Type CI 55-7	g	*3000240	3 (2)	Washer Sq F 2 1/4	
С	2000544	1 (0)	Insulator Spool CI 53-2	h	*	As Req'd.	Primary and Neutral ties	
d	2000624	2	Pin Pole Top Offset 20"-1 3/8"	j	*	As Req'd.	Connectors	
е	*	4 (3)	Bolt Machine 5/8"					

Specify A2N for unit A2 less neutral material. Quantities shown in parenthesis are for A2N.

* Denotes "Grab Bag" item. All bolt lengths are dependent on pole class.

For guying use an E1-2 attached to an F1-3 for everything except #336 AAC NESC Grade B Construction use an E1-3 attached to an F1-4.

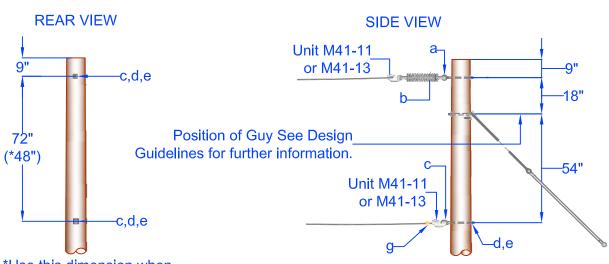


PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Φ Small angle, Double Primary Support, Any Grade of Construction

drawn:	approved	date:	
JBS	MJB	December 12, 2011	

A2/A2N



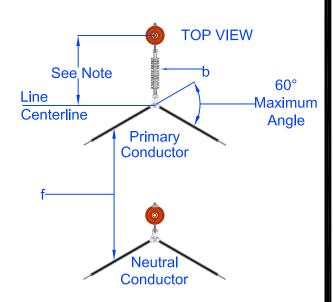
*Use this dimension when installing in existing line with old 4' neutral spacing to prevent down strain on adjacent poles neutral attachments.

Note: If anything other than a 1:1 guy height to lead length ratio is used individual calculations are required.

Possible varieties of Suspension Insulators



Note: When staking a pole with the assembly unit A3, off-set pole stake two feet in the direction of the anchor.



Note: See design guidelines for additional information.

Item	Material Number	Item Quantity	Item Description	Item	Material Number	Item Quantity	Item Description
а	2000262	2(1)	Clevis Anchor Shackle Sml	е	*3000240	2 (1)	Washer Sq F 2 1/4
b	2000551	1	Insulator Susp Poly 35KV CI	f	*	As Req'd.	Armor Rods
С	*	2 (1)	Bolt Eye 5/8"	g	*	As Req'd.	Connectors
d	*3000153	2 (1)	Locknut 5/8" M F				

Specify A3N for unit A3 less neutral material. Quantities shown in parenthesis are for A3N.

Install Units M41-11 or M41-13 as needed. * Denotes "Grab Bag" item. All bolt lengths are dependent on pole class.

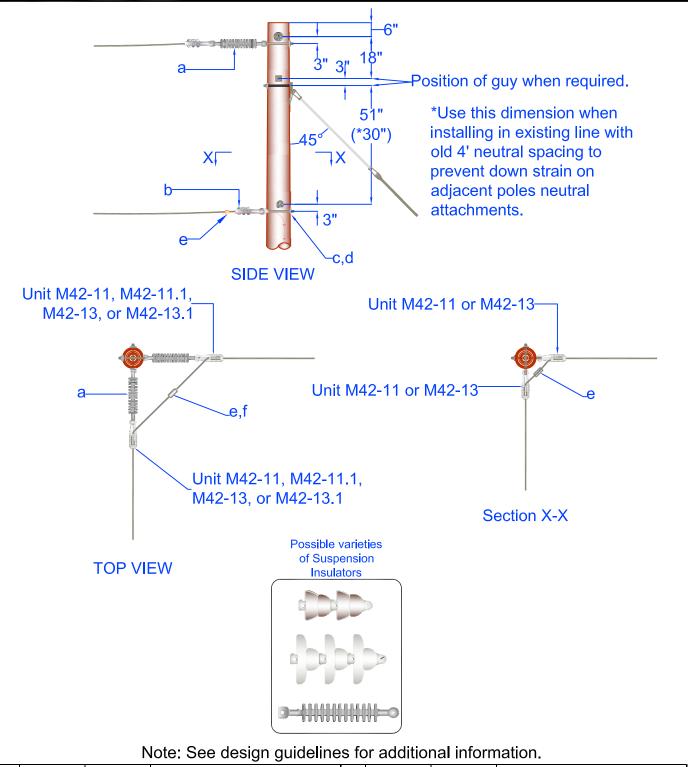
For guying use an E1-2 attached to an F1-3 for everything except #336 AAC NESC Grade B Construction use an E1-3 attached to an F1-4.



PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Φ Medium angle, Any Grade of Construction. Maximum of 60° angle

drawn:	approved	date:	A O / A O N I
JBS	MJB	December 12, 2011	A3/A3N



	· ·							
Item	Material Number	Item Quantity	Item Description	Item	Material Number	Item Quantity	Item Description	
а	2000551	2	Insulator Susp Poly 35KV CI	d	*3000240	4 (2)	Washer Sq F 2 1/4	
b	*	4 (2)	Bolt Eye 5/8"	е	*	As Req'd.	Connectors	
С	*3000153	4 (2)	Locknut 5/8" M F	f	*	As Req'd.	Jumpers	
		0	- if A AN famousit A A land a southed as a family	0	4141 1 1		f A 4N	

Specify A4N for unit A4 less neutral material. Quantities shown in parenthesis are for A4N.

* Denotes "Grab Bag" item. All bolt lengths are dependent on pole class.

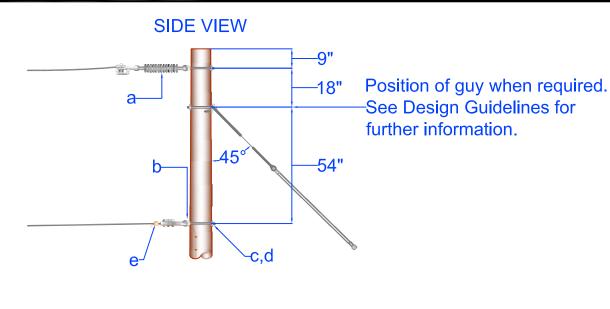
For guying use an E1-2 attached to an F1-3 for everything except #336 AAC NESC Grade B Construction use an E1-3 attached to an F1-4 as needed.



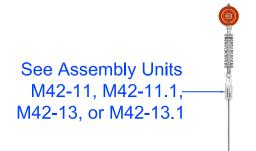
PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Φ Large angle, Any Grade of Construction

drawn:	approved	date:	A 4 / A 4 B I
JBS	MJB	December 12, 2011	A4/A4N



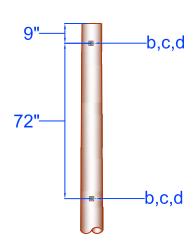
TOP VIEW



Possible varieties of Suspension Insulators



REAR VIEW



Note: See design guidelines for additional information.

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Item	Material Number	Item Quantity	Item Description	Item	Material Number	Item Quantity	Item Description		
а	2000551	1	Insulator Susp Poly 35KV CI	d	*3000240	2 (1)	Washer Sq F 2 1/4		
b	*	2 (1)	Bolt Eye 5/8"	е	*	As Req'd	Connectors		
С	*3000153	2 (1)	Locknut 5/8" M F						

Specify A5N for unit A5 less neutral material. Quantities shown in parenthesis are for A5N.

* Denotes "Grab Bag" item. All bolt lengths are dependent on pole class.

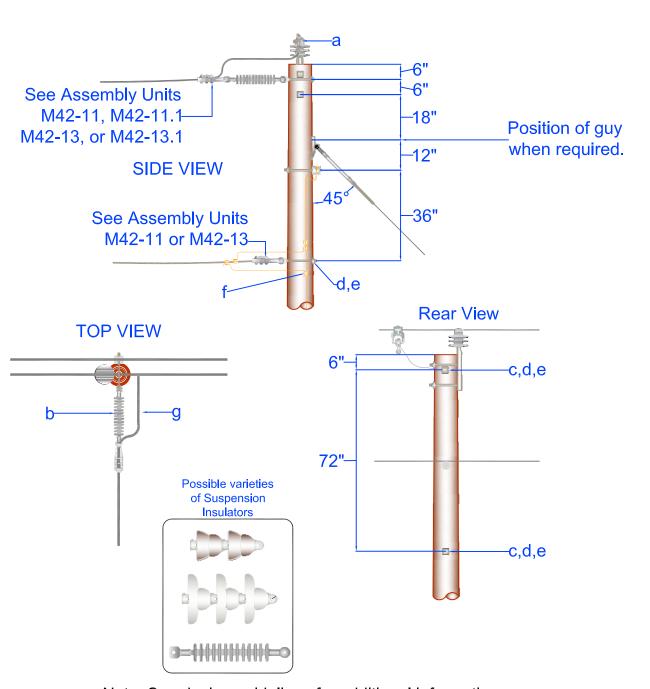
Install Units M42-11, M42-11.1, M42-13, or M42-13.1 as needed.



PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Ф Deadend (Single)

drawn:	approved	date:	A E / A E N I
JBS	MJB	December 12, 2011	A5/A5N



lt	tem	Material Number	Item Quantity	Item Description	ltem	Material Number	Item Quantity	Item Description
	а	2000278	1	Conn HL Gp 8-2/0-8-1/0	е	*3000240	2 (1)	Washer Sq F 2 1/4
	b	2000551	1	Insulator Susp Poly 35KV CI	f	*	As Req'd.	Connectors, wedge
	С	*	2 (1)	Bolt Eye 5/8"	g	*	As Req'd.	Jumpers
	d	*3000153	2 (1)	Locknut 5/8" M F				

Specify A5-1N for unit A5-1 less neutral material. Quantities shown in parenthesis are for A5-1N.

For guying use an E1-2 attached to an F1-3 for everything except #336 AAC NESC Grade B Construction use an E1-3 attached to an F1-4 as needed.

Install Units M42-11, M42-11.1, M42-13, M42-13.1, or M42-17 as needed.

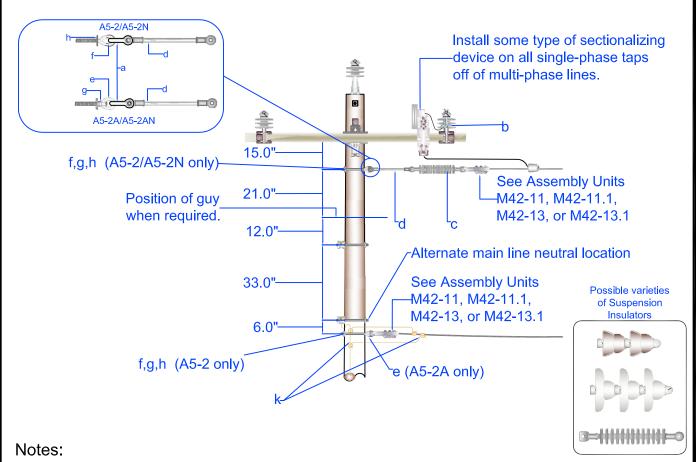


PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Φ Tap off of a 1Φ pole.

drawn:	approved	date:	A = 4/A = 4NI
JBS	MJB	December 12, 2011	A5-1/A5-1N

^{*} Denotes "Grab Bag" item. All bolt lengths are dependent on pole class.



- 1) See design guidelines for additional information.
- 2) If main line neutral is moved to the alternate location be sure not to cause downstrain on adjacent poles.

	Material		A5-2	A5-2A
Item	Number	Item Description	Item Quantity	Item Quantity
а	2000262	Clevis Anchor Shackle Sml	1	1
b	2000278	Conn HL Gp 8-2/0-8-1/0	1	1
С	2000551	Insulator Susp Poly 35KV CI	1	1
d	2000539	12" Fiberglass Extension Link C-TE	1	1
е	*2000610	Nut Eye 5/8"	0	2 (1)
f	*	Bolt Eye 5/8"	2 (1)	0
g	*3000153	Locknut 5/8" M F	2 (1)	2 (1)
h	*3000240	Washer Sq F 2 1/4	2 (1)	0
j	*	Jumpers	As req'd.	As req'd.
k	*	Connectors	As req'd.	As req'd.
	_			

Specify A5-2N or A5-2AN for unit A5-2 or A5-2A less neutral material.

Quantities shown in parenthesis are for A5-2N or A5-2AN.

* Denotes "Grab Bag" item. All bolt lengths are dependent on pole class.

For guying use an E1-2 attached to an F1-3 for everything except #336 AAC NESC Grade B Construction use an E1-3 attached to an F1-4 as needed.

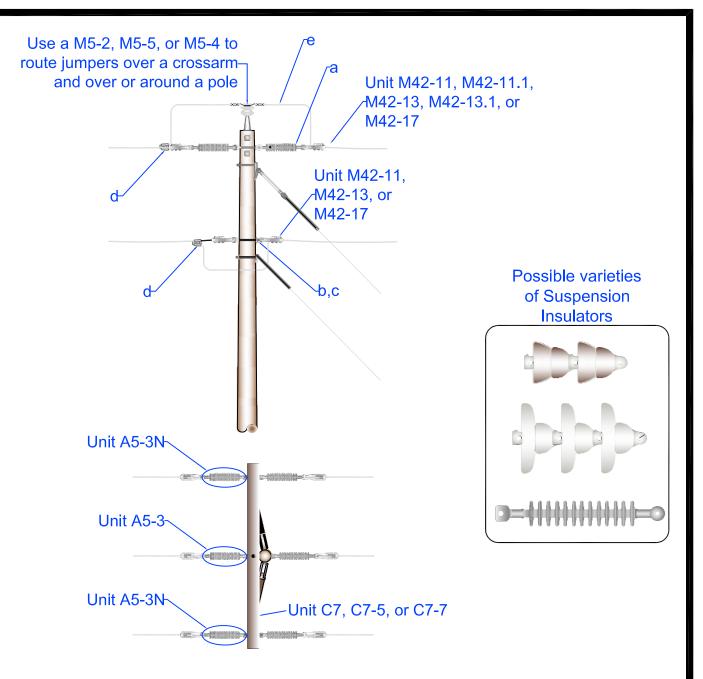
Install Units M42-11, M42-11.1, M42-13, M42-13.1, or M42-17 as needed.



PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Φ Tap off of a 3Φ pole.

A5-2/A5-2N	date:	approved	drawn:
A5-2A/A5-2AN	December 12, 2011	MJB	JBS



Units A5-3 and (2) A5-3N as installed on a C7, C7-5, or C7-7. C7's should not be used on full tension lines of larger than #4 ACSR.

Typical Application of Units A5-3, and (2) A5-3N used at a line opening with no primary jumpers. If using jumpers specify a M5-2 and (2) M5-5's, or (3) M5-5's. Or an A5-4 can be installed in the center phase which includes a M5-2

Note: See design guidelines for additional information.

ltem	Material Number	Item Quantity	Item Description	ltem	Material Number	Item Quantity	Item Description		
а	2000551	1	Insulator Susp Poly 35KV CI	d	*	As Req'd.	Connectors		
b	*2000610	2 (1)	Nut Eye 5/8"	е	*	As Req'd.	Jumpers		
С	*3000153	2 (1)	Locknut 5/8" M F						
	Specify A5-3 for unit A5-3N less neutral material. Quantities in parenthesis are for A5-3N.								
	Specify units M42-11, M42-11.1, M42-13, M42-13.1, or M42-17 as needed.								

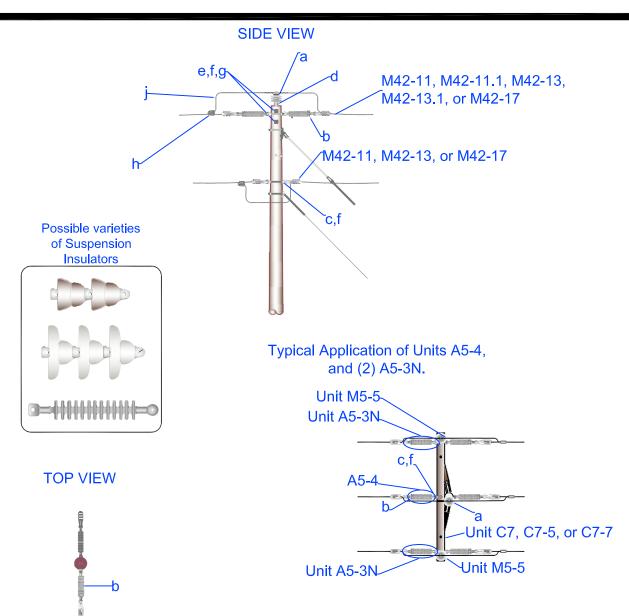
* Denotes "Grab Bag" item.



PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Ф Tap off of an Existing Bolt

drawn:	approved	date:	
JBS	MJB	December 12, 2011	A5-3/A5-3N



Units A5-4 and (2) A5-3N as installed on a C7, C7-5, or C7-7. C7's should not be used on full tension lines of larger than #4 ACSR. Typical Application of Units A5-3, and (2) A5-3N used at a line opening with no primary jumpers. If using jumpers specify a M5-2 and (2) M5-5's, or (3) M5-5's. Or an A5-4 can be installed in the center phase which includes a M5-2.

Note: See design guidelines for additional information.

Item	Material Number	Item Quantity	Item Description	Item	Material Number	Item Quantity	Item Description
а	2000541	1	Insulator Pin Type CI 55-7	f	*3000153	4 (3)	Locknut 5/8" M F
b	2000551	1	Insulator Susp Poly 35KV CI	g	*3000240	2	Washer Sq F 2 1/4
С	*2000610	2 (1)	Nut Eye 5/8"	h	*	As Req'd.	Connectors
d	2000621	1	Pin Pole Top 20"- 1 3/8" Thd	j	*	As Req'd.	Jumpers
е	*	2	Bolt Machine 5/8"				

Specify A5-4N for unit VA5-4 less neutral material. Quantities in parenthesis are for A5-4N.

* Denotes "Grab Bag" item. All bolt lengths are dependent on pole class.

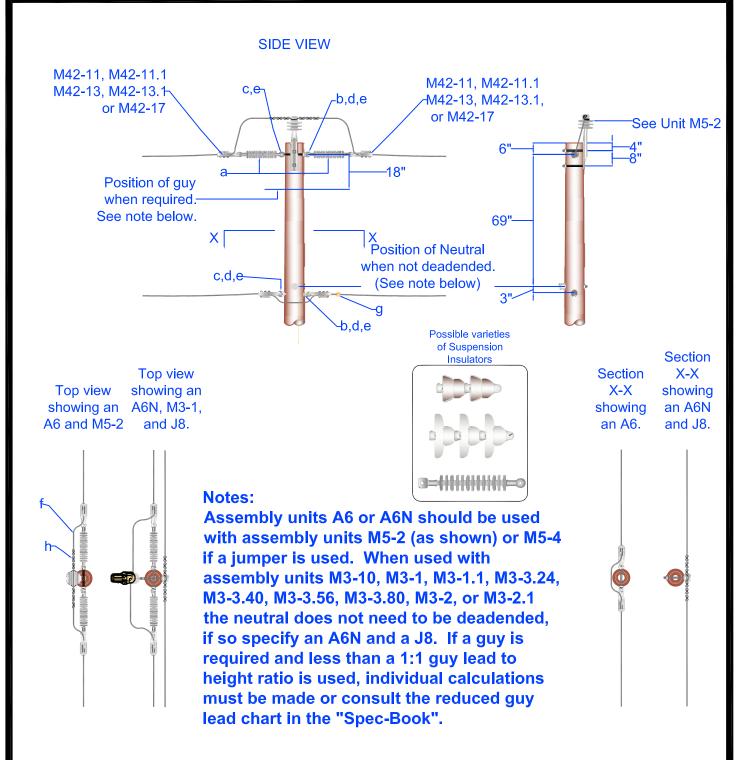


PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Φ Tap off of an Existing Bolt With Pole Top Pin Insulator for Jumper

drawn: approved		date:	
JBS	MJB	December 12, 2011	

A5-4/A5-4N



Item	Material Number	Item Quantity	Item Description	Item	Material Number	Item Quantity	Item Description
а	2000551	2	Insulator Susp Poly 35KV CI	е	*3000240	4 (2)	Washer Sq F 2 1/4
b	*2000610	2 (1)	Nut Eye 5/8"	f	*	As Req'd.	Jumpers
С	*	2 (1)	Bolt Eye 5/8"	g	*	As Req'd.	Connectors
d	*3000153	2 (1)	Locknut 5/8" M F	h	*	As Req'd.	Primary and Neutral Ties

Specify A6N for A6 less the neutral material. Quantities in parenthesis are for A6N.

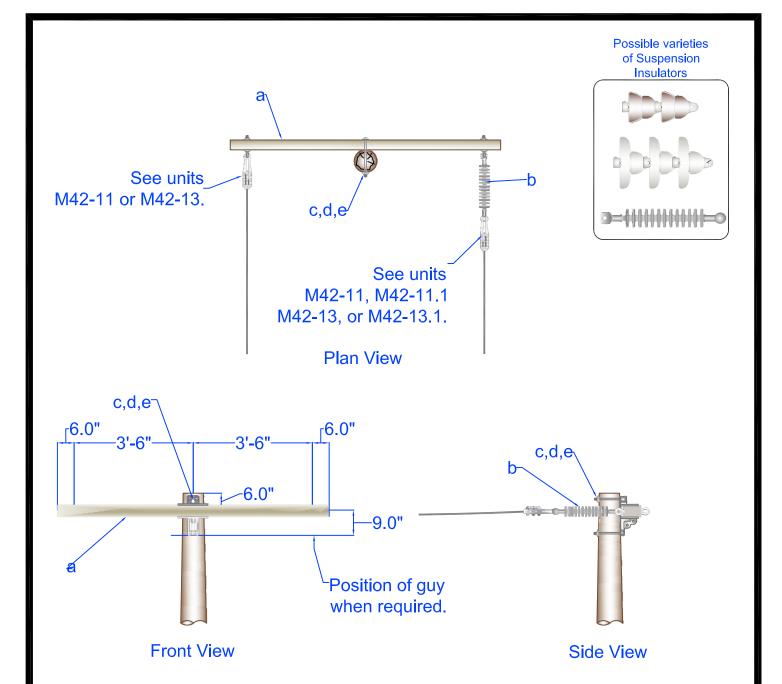
Specify units M42-11, M42-13, M42-13, M42-13.1, or M42-17 as needed. * Denotes "Grab Bag" item. All bolt lengths are dependent on pole class.



PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Ф Vertical Double Deadend

drawn:	approved	date:	A 0 / A 0 N I
JBS	MJB	December 12, 2011	A6/A6N



Item	Material Number	Item Quantity	Item Description	Item	Material Number	Item Quantity	Item Description
а	2001317	1	Xarm DE Fiberglass 8' 3 Wire	d	*3000151	2	Locknut 3/4" M F
b	2000551	1	Insulator Susp Poly 35KV CI	е	*3000230	2	Washer SQ F 21/2x21/2 13/16H
С	*	2	Bolt Machine 3/4"				

There is no Assembly Unit A7N. Install Units M42-11, M42-11.1, M42-13, or M42-13.1 as needed.

* Denotes "Grab Bag" item. All bolt lengths are dependent on pole class.

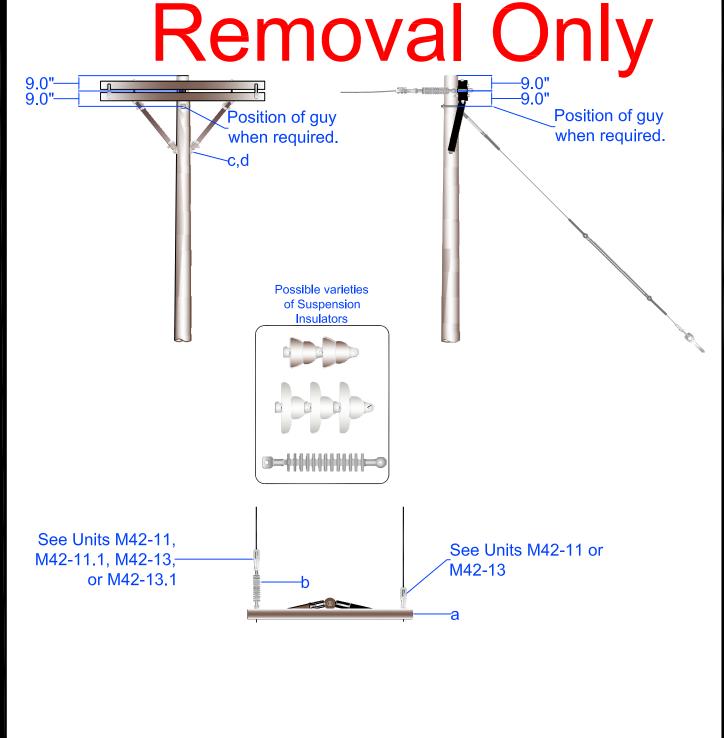


PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Φ Crossarm Construction, Single Deadend

drawn:	approved	date:	
REB	MJB	October 23, 2015	

A7



ltem	Item Number	Item Quantity	Item Description	ltem	Item Number	Item Quantity	Item Description
а	2001312	1	Xarm DE 3 3/4" x 5 3/4" x 8'3W	С	*	1	Bolt Machine 5/8"
b	2000551	1	Insulator Susp Poly 35KV CI	d	*3000153	1	Locknut 5/8" M F

There is no Assembly Unit A7-5N

* Denotes "Grab Bag" item. All bolt lengths are dependent on pole class.

Install Units M42-11, M42-11.1, M42-13, or M42-13.1 as needed.

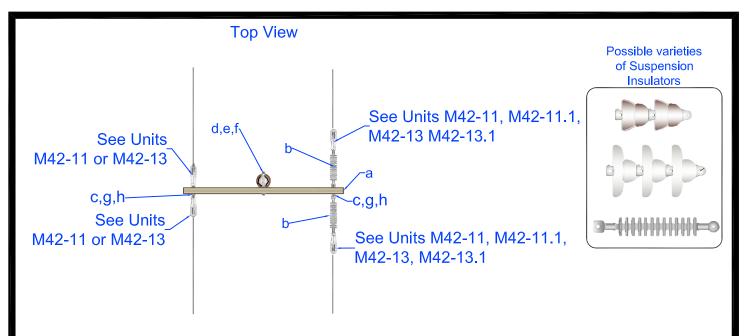
For Full Tension #1/0 ACSR or #336 AAC deadends.



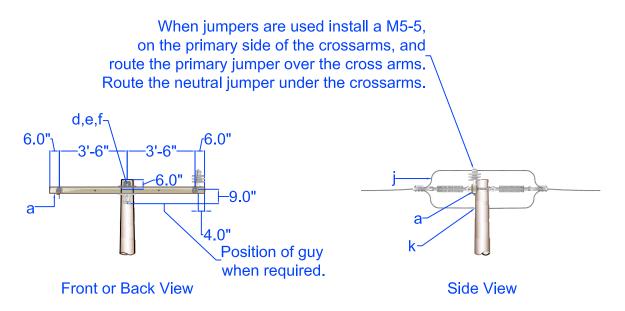
PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Φ#1/0 ACSR or #336 AAC Crossarm Construction (Pre-assembled deadend)

drawn:	approved	date:	A7 C
JBS	MJB	July 25, 2014	A7-5



If unit A8 is used as an angle assembly install a "split bolt" (unit M5-18) installed in the pre-drilled hole 4" from the pole top and perpendicular to the bolts attaching the crossarm to the pole.



Note: See design guidelines for additional information.

Item	Material	Itom Quantity	em Quantity Item Description It	Item	Material	Item Quantity	Item Description	
	Number	item Quantity		item	Number	item Quantity	item Description	
а	2001317	1	Xarm DE Fiberglass 8' 3 Wire	f	*3000230	2	Washer SQ F 21/2x21/2 13/16H	
b	2000551	2	Insulator Susp Poly 25KV CI	g	*3000151	2	Locknut 5/8" M F	
С	*2000610	2	Nut Eye 5/8"	h	*3000240	2	Washer Sq F 2 1/4	
d	*	2	Bolt Machine 3/4"	j	*	As Req'd.	Jumpers	
е	*3000153	2	Locknut 3/4" M F	k	*	As Req'd.	Connectors	

There is no Assembly Unit A8N. Install Units M42-11, M42-11.1, M42-13, or M42-13.1 as needed.

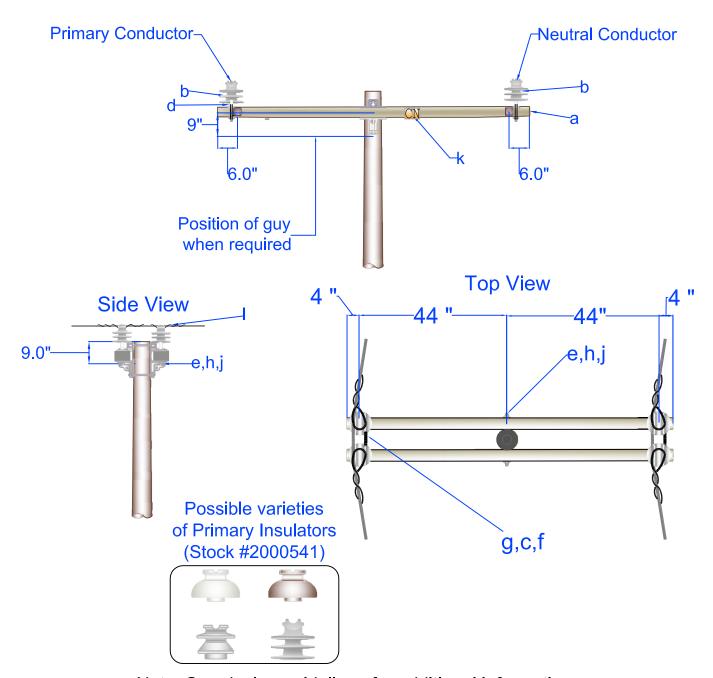


PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Φ Crossarm Construction Double Deadend

drawn:	approved	date:	A O
REB	MJB	October 23, 2015	Að

Front or Back View



Note: See design guidelines for additional information.

Item	Material Number	Item Quantity	Item Description	Item	Material Number	Item Quantity	Item Description
а	2001328	2	Xarm Fbgls 8'	g	*	2	Bolt Dbl Arming 5/8"
b	2000541	4	Insulator Pin Type CI 55-7	h	*3000151	4	Locknut 3/4" M F
С	*3000153	8	Locknut 5/8" M F	j	*3000230	4	Washer SQ F 21/2x21/2 13/16H
d	2000626	4	Pin Xarm 1 3/8" Thd Reg	k	*	2	Letters C and N
е	*	2	Bolt Dbl Arming 3/4"	ı	*	As Req'd.	Primary and Neutral ties
f	*3000240	8	Washer Sq F 2 1/4				

There is no Assembly Unit A9N

* Denotes "Grab Bag" item. All bolt lengths are dependent on pole class.

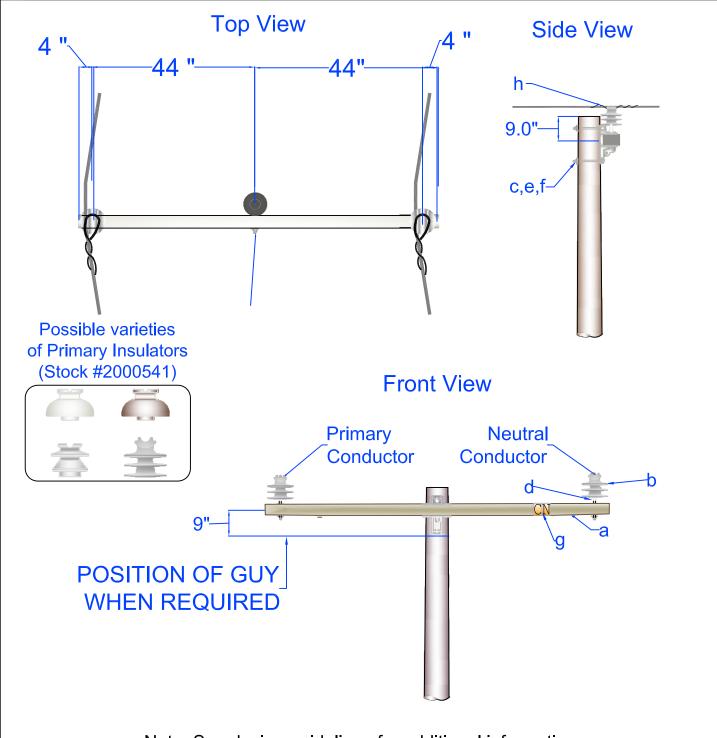


PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Ф Double Crossarm Construction

drawn:	approved	date:
REB	MJB	October 23, 2015

A9



Item	Material Number	Item Quantity	Item Description	Item	Material Number	Item Quantity	Item Description
а	2001328	1	Xarm Fbgls 8'	е	*3000243	2	Washer SQ F 21/2x21/2 13/16H
b	2000541	2	Insulator Pin Type CI 55-7	f	*	2	Bolt Machine 3/4"
С	*3000151	2	Locknut 3/4" M F	g	*	1	Letters C and N
d	2000626	2	Pin Xarm 1 3/8" Thd Reg	h	*	As Req'd.	Primary and Neutral ties

There is no Assembly Unit A9-1N

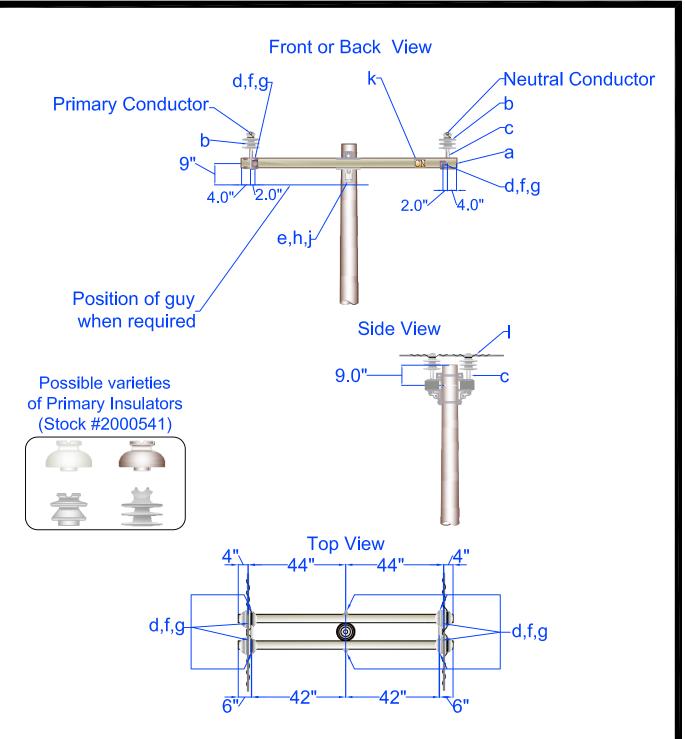
* Denotes "Grab Bag" item. All bolt lengths are dependent on pole class.



PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Ф Single Crossarm Construction

drawn:	approved	date:	A O 4
REB	MJB	October 23, 2015	A9-1



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Item	Material	Item Quantity	Item Description	Item	Material	Item Quantity	Item Description		
iteiii	Number	item Quantity	item bescription	iteiii	Number	item Quantity	item bescription		
а	2001328	2	Xarm Fbgls 8'	g	*3000240	8	Washer Sq F 2 1/4		
b	2000541	4	Insulator Pin Type CI 55-7	h	*3000151	4	Locknut 3/4" M F		
С	2000625	4	Pin Xarm 1 3/8" Thd Clamp Type	j	*3000230	4	Washer SQ F 21/2x21/2 13/16H		
d	*	2	Bolt Dbl Arming 5/8"	k	*	2	Letters C and N		
е	*	2	Bolt Dbl Arming 3/4"	-	*	As Req'd.	Primary and Neutral ties		
f	*3000153	8	Locknut 5/8" M F						

There is no Assembly Unit A9-2N

* Denotes "Grab Bag" item. All bolt lengths are dependent on pole class.

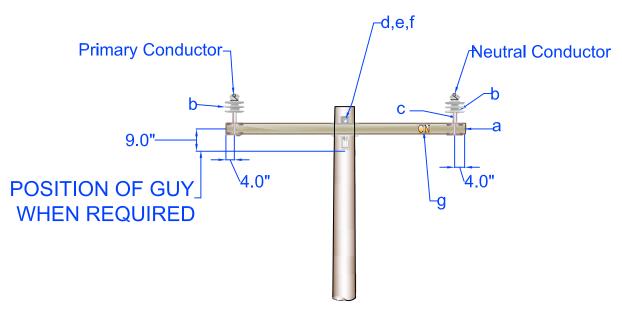


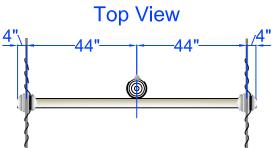
PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Φ Double Crossarm Construction with "Saddle Pins" for 1Φ

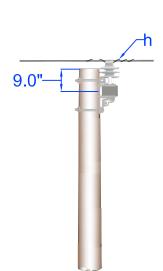
drawn:	approved	date:	A O O
REB	MJB	October 23, 2015	A9-2

Front or Back View





Side View



Possible varieties of Primary Insulators (Stock #2000541)



Note: See design guidelines for additional information.

ltem	Material Number	Item Quantity	Item Description	Item	Material Number	Item Quantity	Item Description
a b	2001328	1	Xarm Fbgls 8'	е	*3000151	2	Locknut 3/4" M F
b	2000541	2	Insulator Pin Type CI 55-7	f	*3000230	2	Washer SQ F 21/2x21/2 13/16H
С	2000625	2	Pin Xarm 1 3/8" Thd Clamp Type	g	*	1	Letters C and N
d	*	2	Bolt Machine 3/4"	h	*	As Req'd.	Primary and Neutral ties

There is no Assembly Unit A9-3N

* Denotes "Grab Bag" item. All bolt lengths are dependent on pole class.



PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

1Φ Single Crossarm Construction with "Saddle Pins"

drawn:	approved	date:	
REB	MJB	October 23, 2015	

A9-3