

Unit	Material Number	Item Quantity	Item Description
a	2000541	1	Insulator Pin Type CL 55-7
b	2000621	1	Pin Pole Top 20" - 1 3/8" Thd
c	*	2	Bolt Machine 5/8"
d	*3000153	2	Locknut 5/8" MF
e	*3000240	2	Washer Sq F 2 1/4
f	*	As Required	Conductor Ties

*Denotes "Grab Bag" Item. Bolt lengths are dependent on pole class.

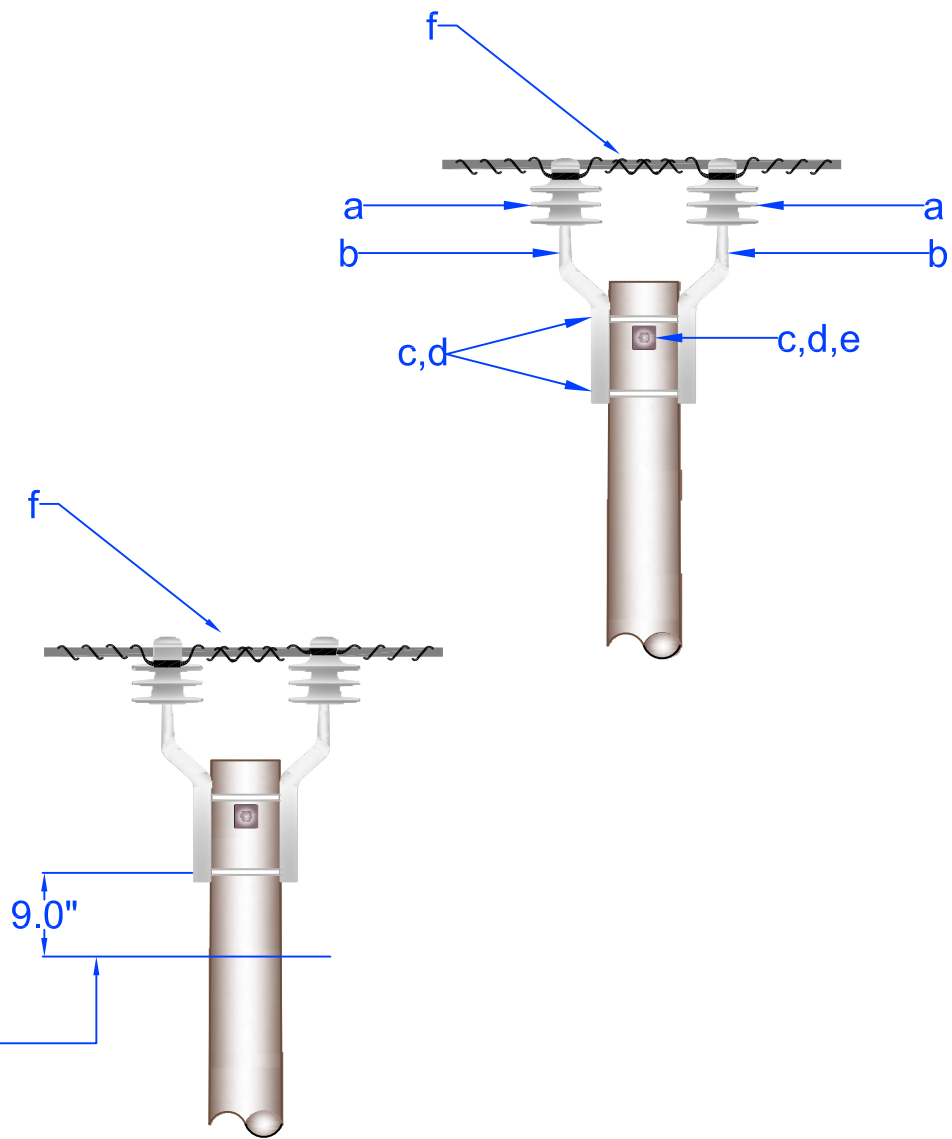


PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

Overhead Groundwire Support Tangent

drawn:	approved	date:
REB	MJB	March 23, 2012

ZM1



Position of guy when required.

Unit	Material Number	Item Quantity	Item Description
a	2000541	2	Insulator Pin Type CL 55-7
b	2000624	2	Pin Pole Top Offset 20" - 1 3/8"
c	*	3	Bolt Machine 5/8"
d	*3000153	3	Locknut 5/8" MF
e	*3000240	1	Washer Sq F 2 1/4
f	*	As Required	Conductor Ties

*Denotes "Grab Bag" Item. Bolt lengths are dependent on pole class.

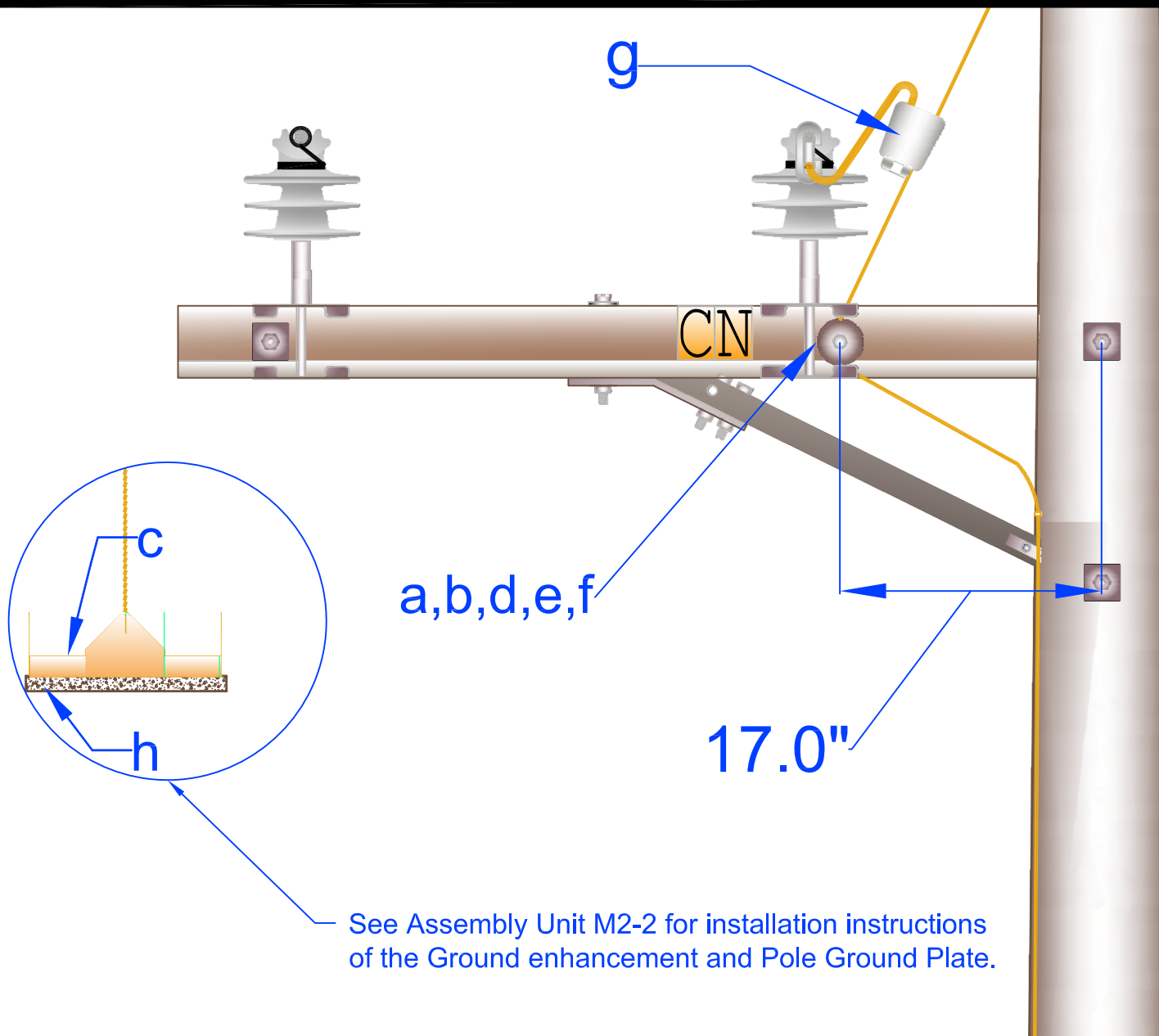


PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

Overhead Groundwire Support Double Support

drawn:	approved	date:
REB	MJB	March 23, 2012

ZM1-1



See Assembly Unit M2-2 for installation instructions of the Ground enhancement and Pole Ground Plate.

Unit	Material Number	Item Quantity	Item Description
a	2000543	1	Insulator Spool CL 53-1
b	*3000153	1	Locknut 5/8" MF
c	2000631	1	Plate Pole Ground Full Electrd
d	*3000240	2	Washer SQ F 2 1/4
e	*2001499	As required	Wire Copper Clad Steel #2 Str 7
f	*2000113	1	Bolt Upset Sgl 5/8" x 10"
g	*2000390	1	Conn Wdg F/O 1/0 ACSR
h	2000491	25 pounds	Ground Enhancement

*Denotes "Grab Bag" Item.

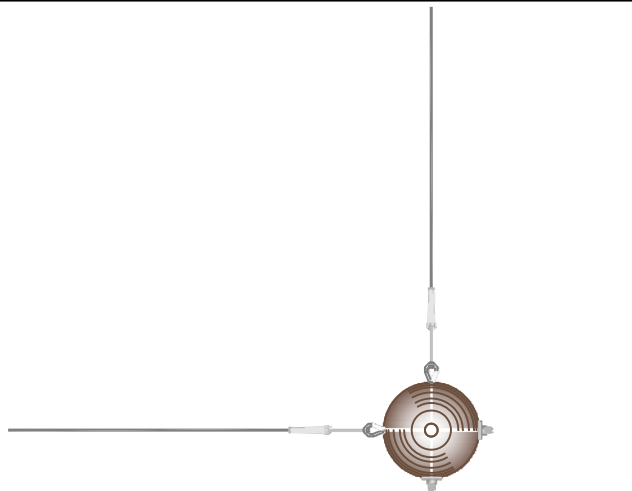


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COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

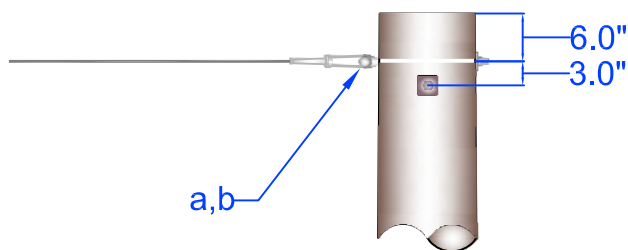
Pole Ground 34.5KV

drawn:	approved	date:
REB	MJB	March 16, 2012

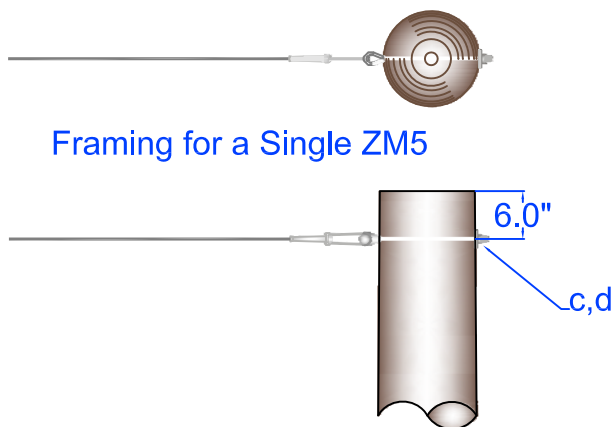
ZM2-16



Framing for Two ZM5



Framing for a Single ZM5



Unit	Material Number	Item Quantity	Item Description
a	*2000429	1	Deadend Auto 3/8" Guy
b	*	1	Thimble Eye 5/8"
c	*3000240	1	Washer Sq F 2 1/4
d	*3000153	1	Locknut 5/8" MF

*Denotes "Grab Bag" Item. Bolt lengths are dependent on pole class.

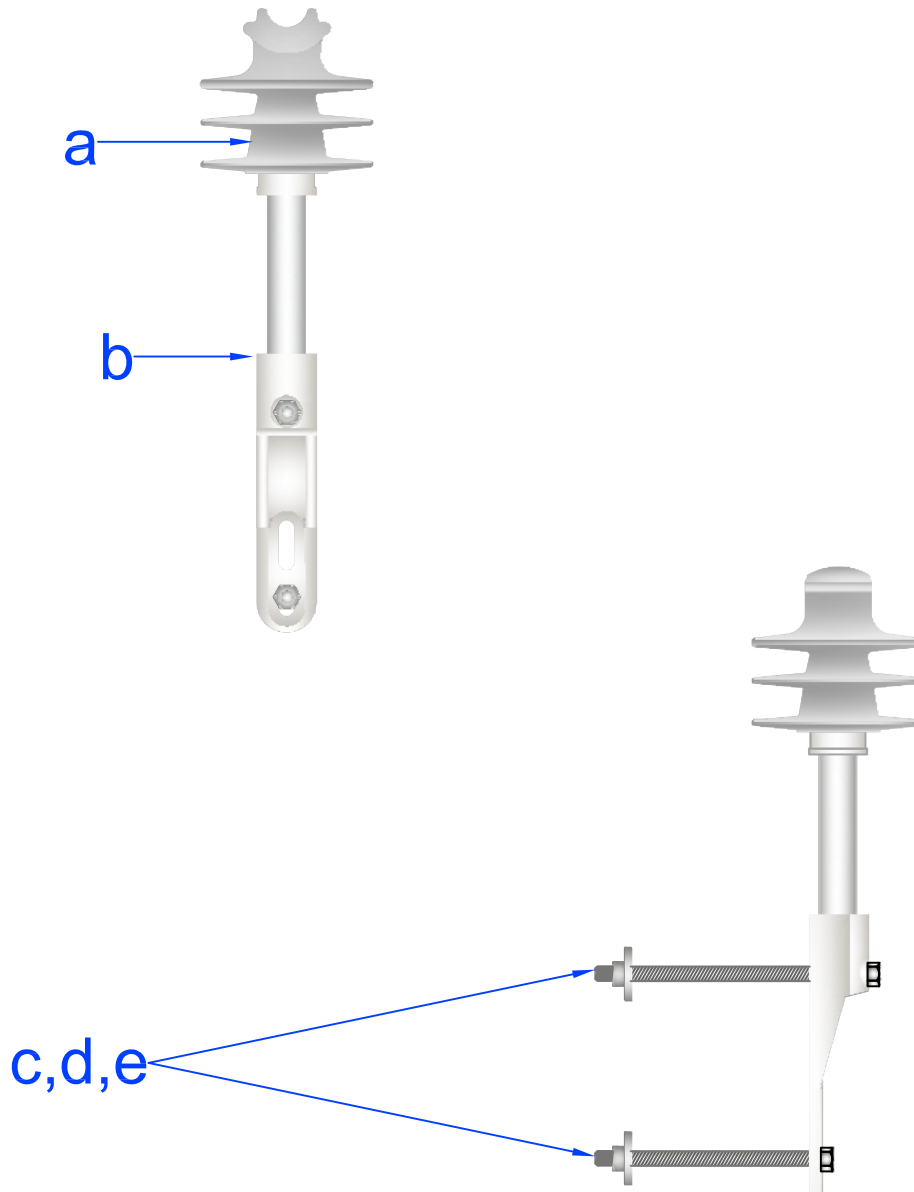


PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

Overhead Groundwire Deadend

drawn:	approved	date:
REB	MJB	March 23, 2012

ZM5



Unit	Material Number	Item Quantity	Item Description
a	2000541	1	Insulator Pin Type CL 55-7
b	2000623	1	Pin Pole Top Fbrgls 1 3/8" Thd
c	*	2	Bolt Machine 5/8"
d	*3000153	2	Locknut 5/8" MF
e	*3000240	2	Washer SQ F 2 1/4

*Denotes "Grab Bag" Item. Bolt lengths are dependent on pole class.



PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

Fiberglass Pole Top Pin and Insulator

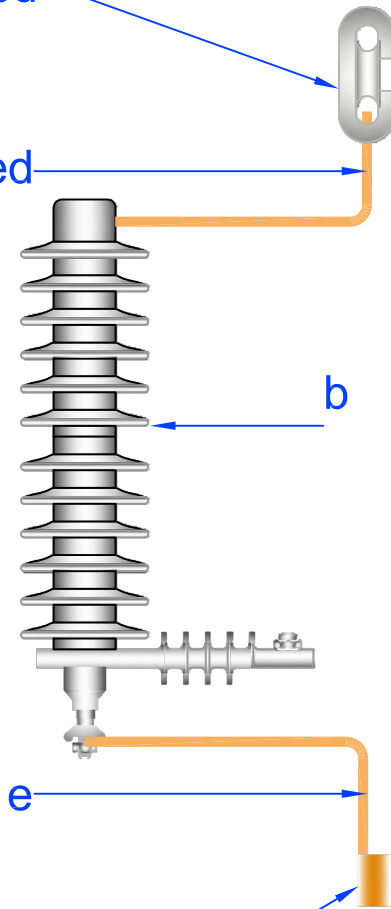
drawn:	approved	date:
REB	MJB	March 16, 2012

ZM5-2

Install a ZM5-6 on at least every third pole in a line operating at 19.9/34.5kV .

d, as required

e, as required

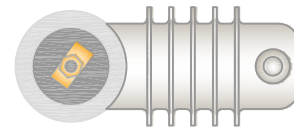


b

e

Connect ground side of arrester to the pole ground or on steel poles to the provided grounding lug

d, as required



Unit	Material Number	Item Quantity	Item Description
a	2000495	1	Guard Bird Arrester
b	2000017	1	Arrester Dist 27KV MOV
c	2000278	1	Conn HL Gp 8-2/0-8-1/0
d	*	2	Connectors
e	*	2	Jumpers

*Denotes "Grab Bag" item.

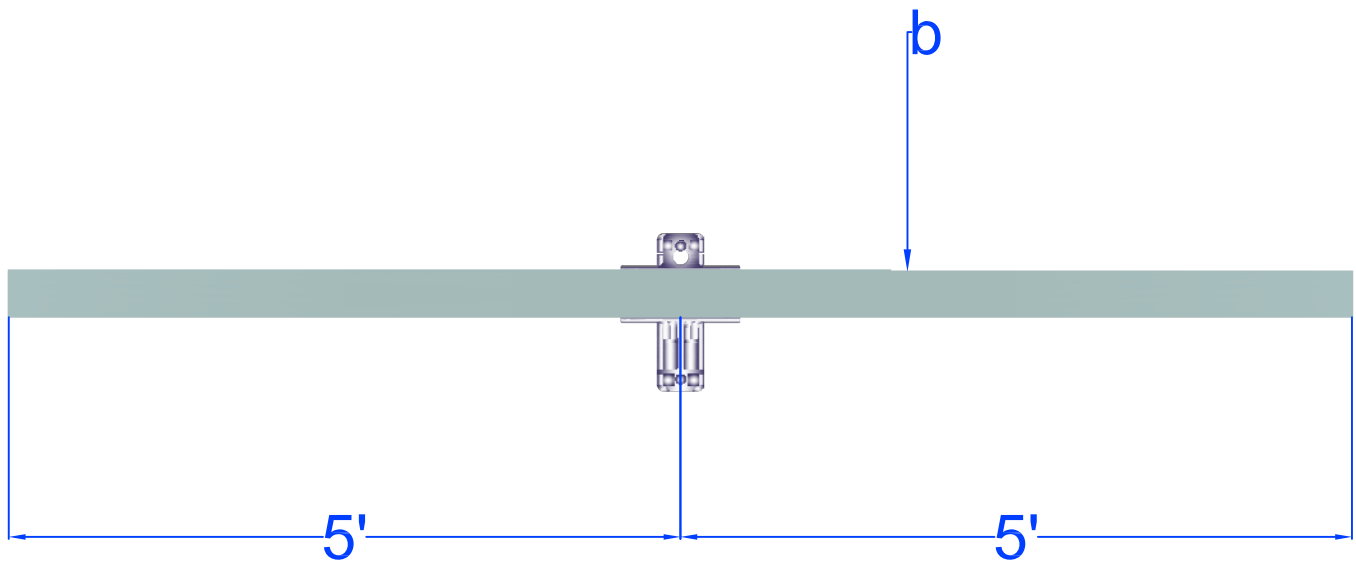
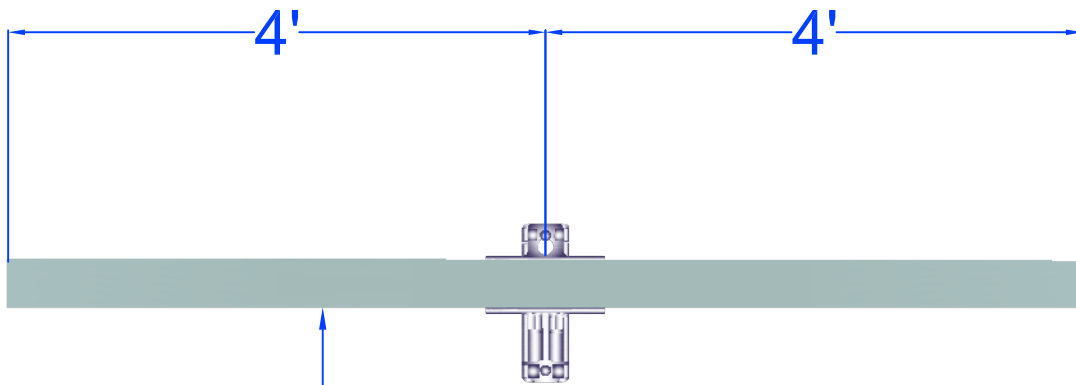


PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

35KV Lightning Arrester and Jumpers

drawn: REB	approved MJB	date: March 16, 2012
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ZM5-6



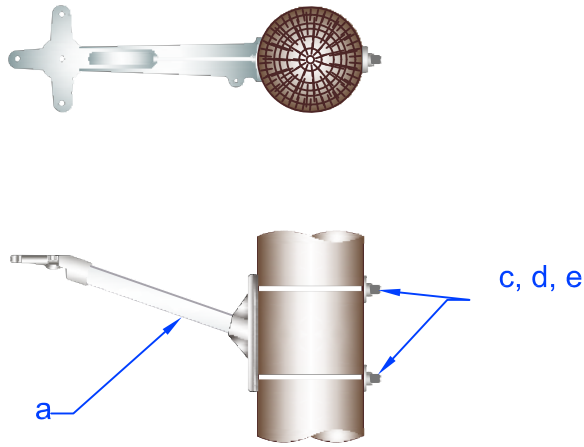
Unit	Material Number	Item Description	ZM5-15	ZM5-16
a	2001328	8' Fiberglass Crossarm	1	
b	2001324	10' Fiberglass Crossarm		1



PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

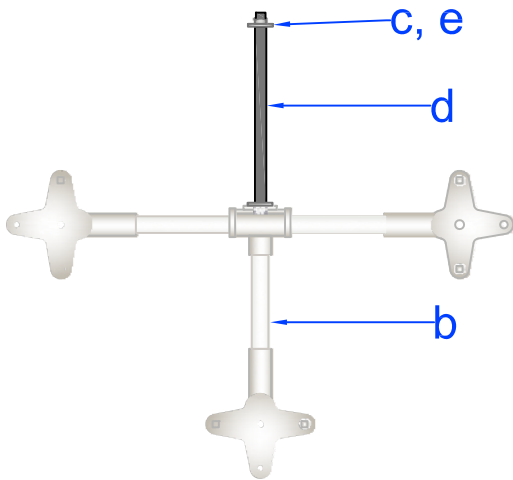
Fiberglass Crossarms

drawn: REB	approved MJB	date: March 23, 2012	ZM5-15/ZM 5-16
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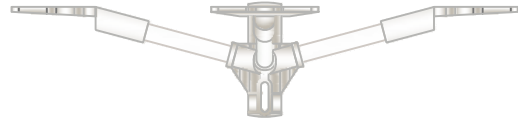


ZM5-15B

Top View



Front View



ZM5-16B

Item	Material Number	Item Description	ZM5-15B	ZM5-16B
a	2000166	Bracket Standoff 18" 3 Pos FG	1	
b	2000151	Bracket Equipment Mount FG 3Ph		1
c	*3000240	Washer Sq F 2 1/4	2	2
d	*	Bolt Machine 5/8"	2	2
e	*3000153	Locknut 5/8" MF	2	2

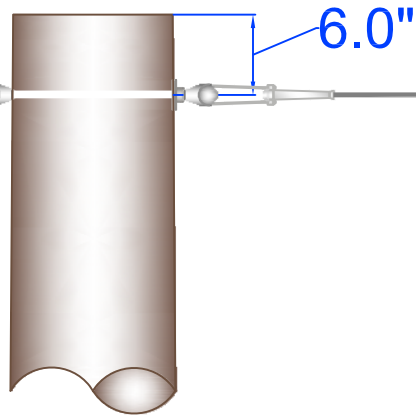
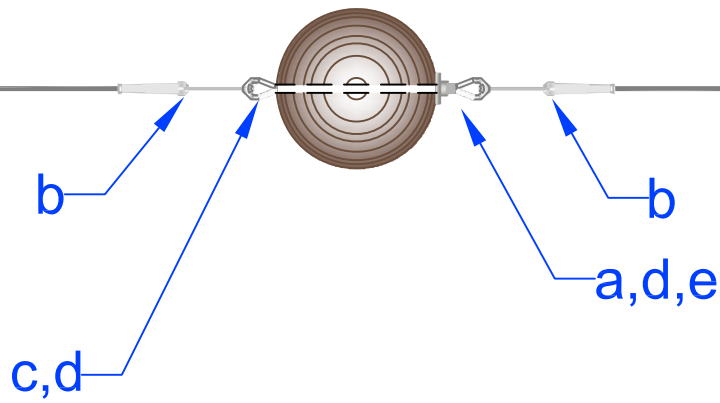
*Denotes "Grab Bag" item. Bolt lengths are dependent on pole class.



PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

Standoff Brackets

drawn: REB	approved MJB	date: March 30, 2012	ZM5-15B/ZM5-16B
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Unit	Material Number	Item Quantity	Item Description
a	2000614	1	Nut Thimble Eye 5/8" Sgl
b	*2000429	1	Deadend Auto 3/8" Guy
c	*	1	Thimble Eye 5/8"
d	*3000240	1	Washer Sq F 2 1/4
e	*3000153	1	Locknut 5/8" MF

*Denotes "Grab Bag" Item. Bolt lengths are dependent on pole class.



PEDERNALES ELECTRIC
COOPERATIVE, INC.
CONSTRUCTION ASSEMBLY UNIT

Overhead Groundwire Double Deadend

drawn:	approved	date:
REB	MJB	March 23, 2012

ZM6