

CROSS ARMS

04



CROSSARMS AND FITTINGS

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CROSSARM AND FITTINGS

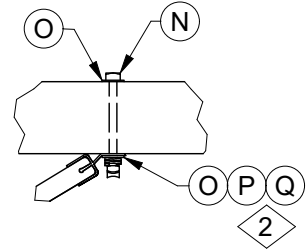
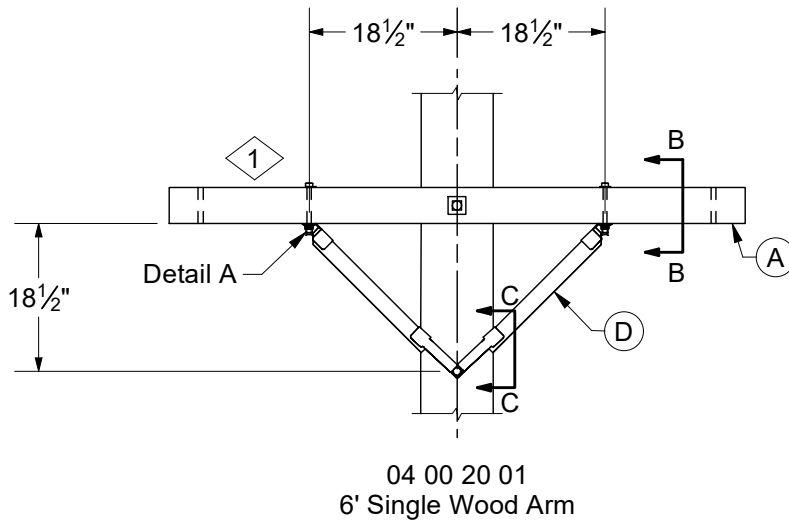
Fiberglass Assembly Loading Criteria

Fiberglass Crossarm Loadings									
Description	DCS #	Crossarm STK #	Ultimate Transverse Load (lbs/wire)	No. Wire	Ultimate Longitudinal Load (lbs/wire)	No. Wire	Ultimate Vertical Load (lbs/wire)	No. Wire	Weight
8' Tangent Arm	04 00 41 14	41 01 286	1,750	4	1,375	4	1750	4	41
10' Tangent Arm	04 00 41 16	41 01 285	3,500	4	1,375	4	1750	4	48
12' Tangent Arm	04 00 41 20	41 01 309	4,375	6	2,250	2	3125	2	74
			-	-	1,125	6	1625	6	74
16' Tangent Arm	04 00 41 21	41 01 312	4,375	6	1,625	2	2500	2	91
			-	-	875	6	1625	6	91
6' Dead End Arm	04 00 42 01	41 01 291	4,625	2	6,000	2	-	-	47
8' Dead End Arm	04 00 42 02	41 01 189	4,625	2	5,250	2	-	-	54
10' Dead End Arm	04 00 42 03	41 01 295	3,375	4	4,000	4	1,313	4	69
12' Dead End Arm	04 00 42 04	41 01 307	6,375	3	7,500	3	-	-	107
9' Double Stack HD Dead End Arm	04 00 42 05	41 01 301	6,813	4	7,875	4	-	-	159
11' Double Stack HD Dead End Arm	04 00 42 06	41 01 302	6,813	4	8,000	4	-	-	142
12' Double Stack HD Dead End Arm	04 00 42 07	41 01 308	13,625	2	10,000	2	-	-	167
			6,813	4	7,375	4	-	-	167
8' Alley Arm	04 00 43 01	41 01 293	625	2	500	2	675	2	54
10' Alley Arm	04 00 43 02	41 01 294	312.5	4	275	4	375	4	63

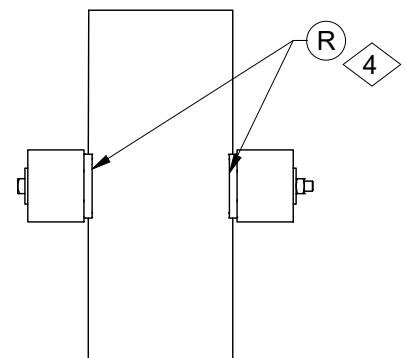
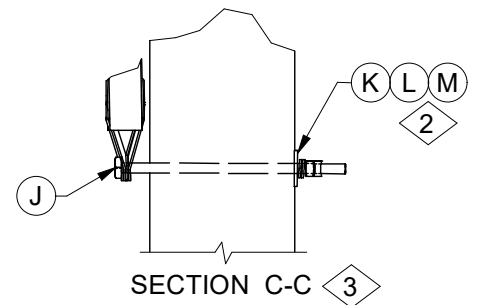
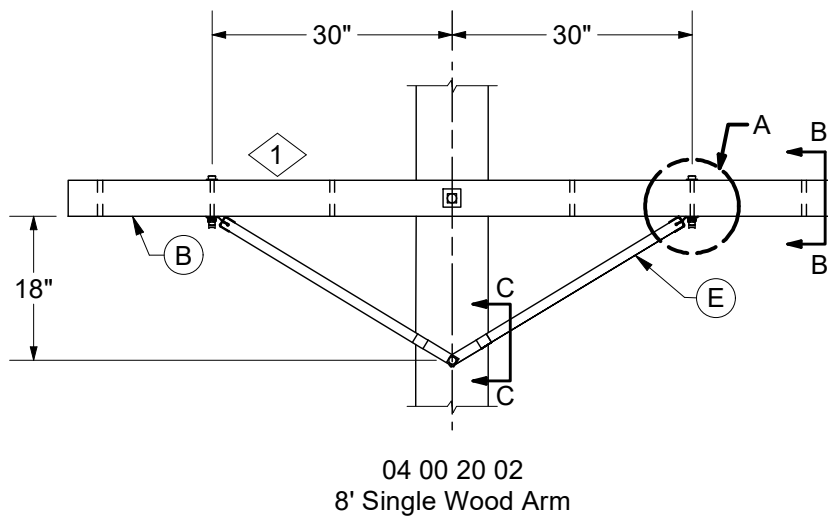
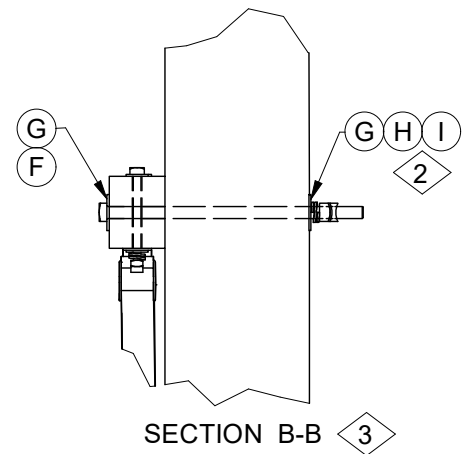
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DISTRIBUTION CONSTRUCTION STANDARDS

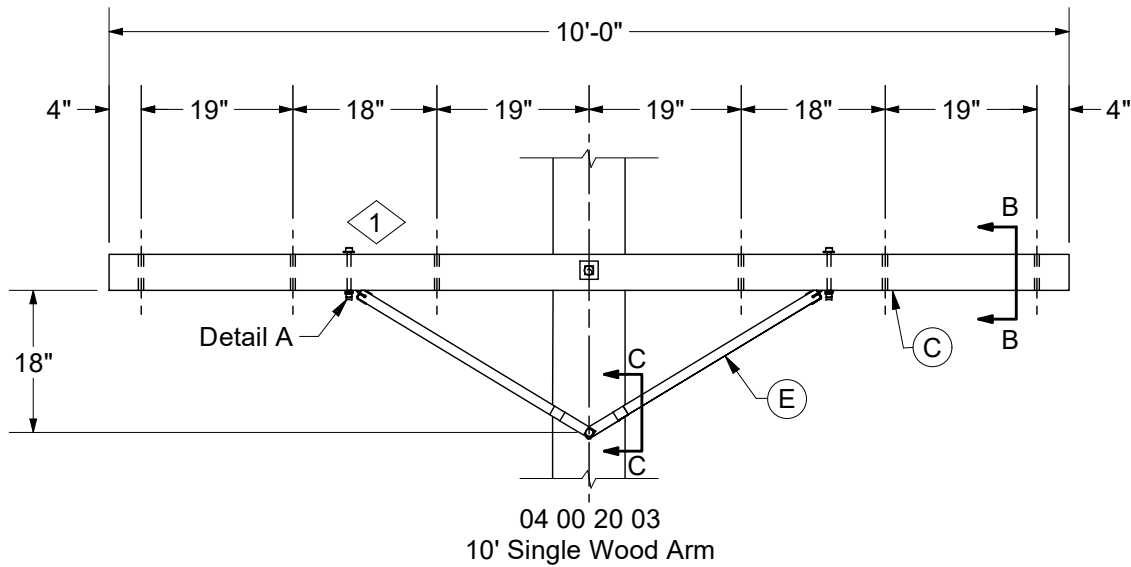
REV	DATE	ENG	DESCRIPTION
2	01/01/21	KR	Converted to new format
1	04/11/11	MJ	



DETAIL A



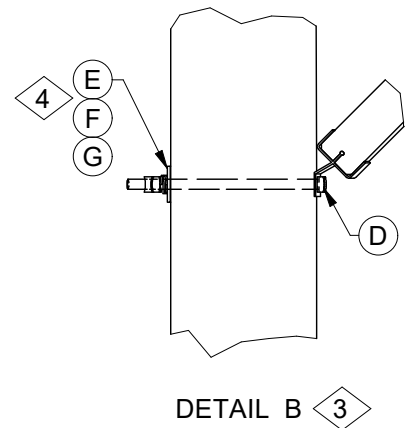
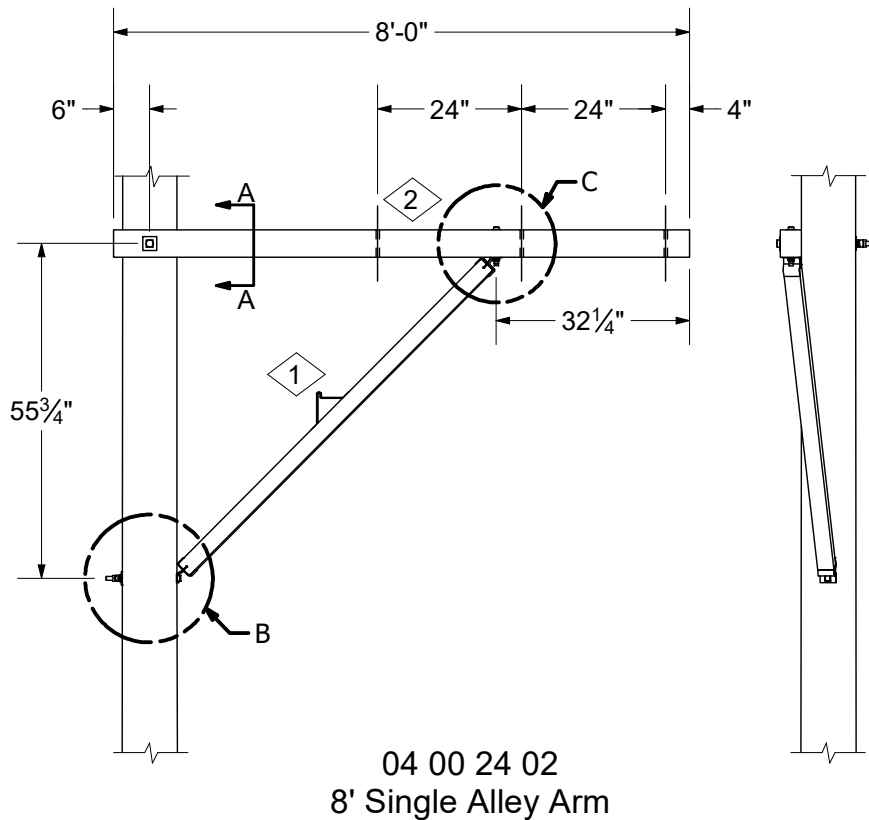
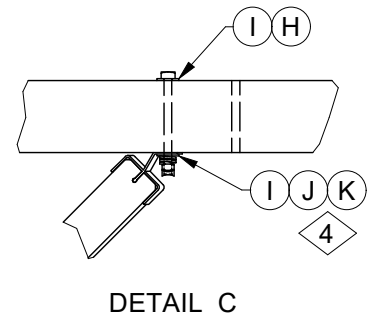
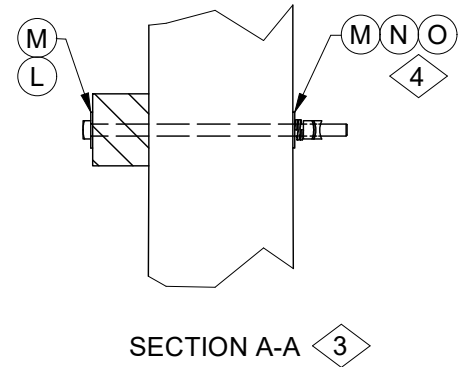
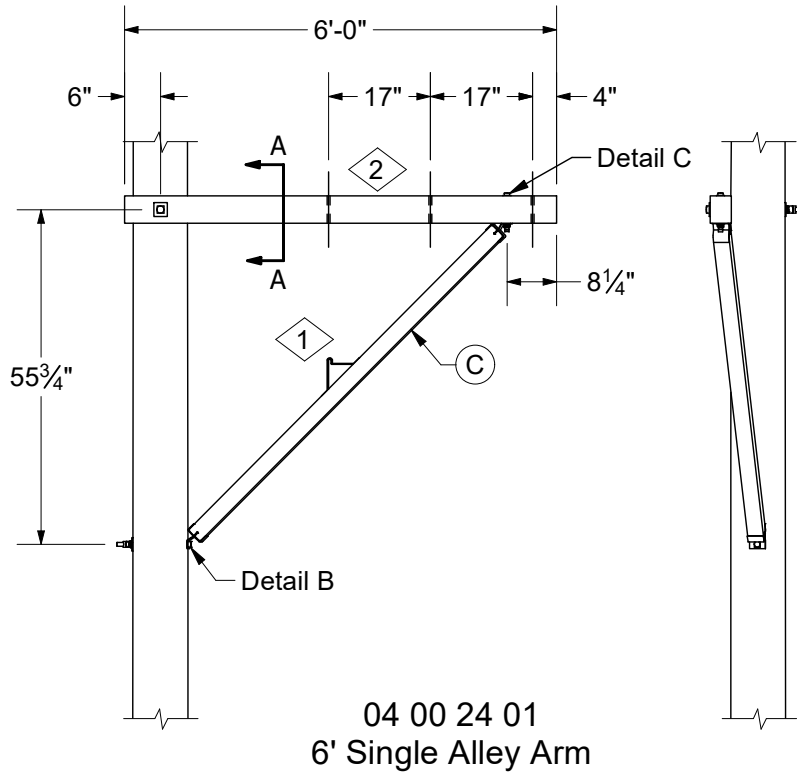
Double Arm Grid Gain Plate



CONSTRUCTION NOTE(s):

1. Field drill if required.
2. Assemble items in order listed. Square nut provided with bolt is used after double coil washer. Double coil washer not needed on composite poles. Lock nuts must be placed after nut included with bolt stock code number.
3. Always load the non-threaded portion of the bolt with arms and braces.
4. If back to back arms are needed, include item R. (Maintenance Only)
5. Use longer machine bolts for larger wood or composite poles if required.

ITEM	STK / DCS #	DESCRIPTION	04 00 20 **	01	02	03
A	41 01 006	6' Crossarm - 3-1/2" x 4-1/2"		1	-	-
B	41 01 014	8' Crossarm - 3-1/2" x 4-1/2"		-	1	-
C	41 01 008	10' Crossarm - 3-1/2" x 4-1/2"		-	-	1
D	41 56 063	Brace - 37" V		1	-	-
E	41 56 016	Brace - 60" V		-	1	1
F	23 52 254	Bolt, Mach., 3/4" x 16" w/ square nut		1	1	1
G	23 66 131	Washer, Square, 3/4"		2	2	2
H	23 66 135	Lock Washer - 3/4" Double Coil		1	1	1
I	23 65 042	Lock Nut - 3/4" Square		1	1	1
J	23 52 066	Bolt, Mach., 5/8" x 14" w/ square nut		1	1	1
K	23 66 027	Washer - Square 5/8"		1	1	1
L	23 66 134	Lock Washer - 5/8" Double Coil		1	1	1
M	23 65 043	Lock Nut - 5/8" Square		1	1	1
N	23 52 038	Bolt, Mach., 1/2" x 6" w/ square nut		2	2	2
O	23 66 017	Washer - Round 1/2"		4	4	4
P	23 66 133	Lock Washer - Double Coil 1/2"		2	2	2
Q	23 65 056	Lock Nut - 1/2" Square		2	2	2
@4 R	23 77 218	Plate, Grain, Grid, Crossarm		2	2	2





CROSSARMS AND FITTINGS

Wood Single Alley Arm Assembly

04 00 24 **

2 of 2

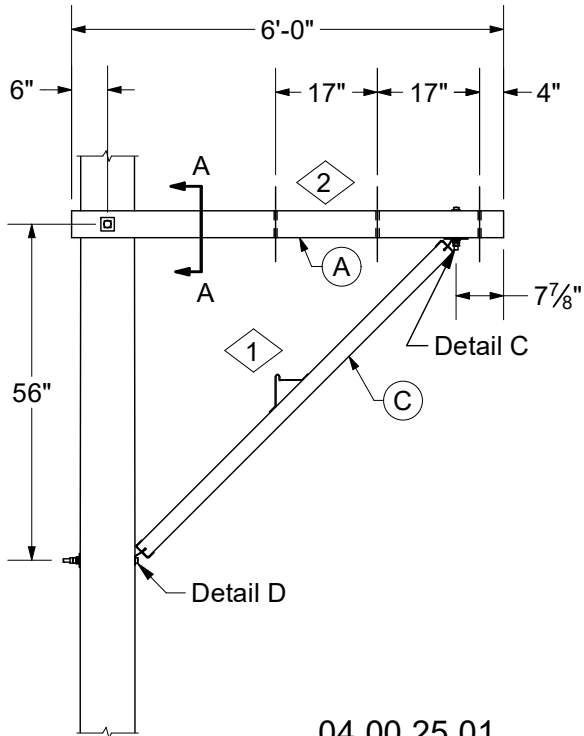
CONSTRUCTION NOTE(s):

1. Heel brace step, Stock #23 67 064 is optional and is not shown in material list.
2. Field drill, if required.
3. Always load the non-threaded portion of the bolt with arms and braces.
4. Assemble items in order listed. Square nut provided with bolt is used after double coil washer. Double coil washer not needed on composite poles. Lock nuts must be placed after nut included with bolt stock code number.
5. Use longer machine bolts for larger wood or composite poles if required.

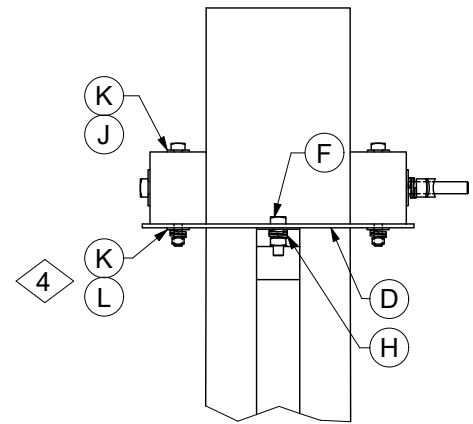
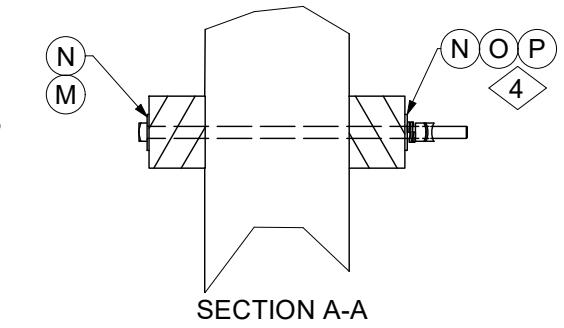
ITEM	STK / DCS #	DESCRIPTION	04 00 24 **	01	02
A	41 01 006	6' Crossarm - 3-1/2" x 4-1/2"		1	-
B	41 01 014	8' Crossarm - 3-1/2" x 4-1/2"		-	1
C	41 56 023	Heel Brace - 6'-0"		1	1
D	23 52 065	Bolt, Mach., 5/8" x 12" w/ square nut		1	1
E	23 66 027	Washer - Square 5/8"		1	1
F	23 66 134	Lock Washer - 5/8" Double Coil		1	1
G	23 65 043	Lock Nut - 5/8" Square		1	1
H	23 52 038	Bolt, Mach., 1/2" x 6" w/ square nut		1	1
I	23 66 017	Washer - Round 1/2"		2	2
J	23 66 133	Lock Washer - Double Coil 1/2"		1	1
K	23 65 056	Lock Nut - 1/2" Square		1	1
L	23 52 254	Bolt, Mach., 3/4" x 16" w/ square nut		1	1
M	23 66 131	Washer, Square, 3/4"		2	2
N	23 66 135	Lock Washer - 3/4" Double Coil		1	1
O	23 65 042	Lock Nut - 3/4" Square		1	1

DISTRIBUTION CONSTRUCTION STANDARDS

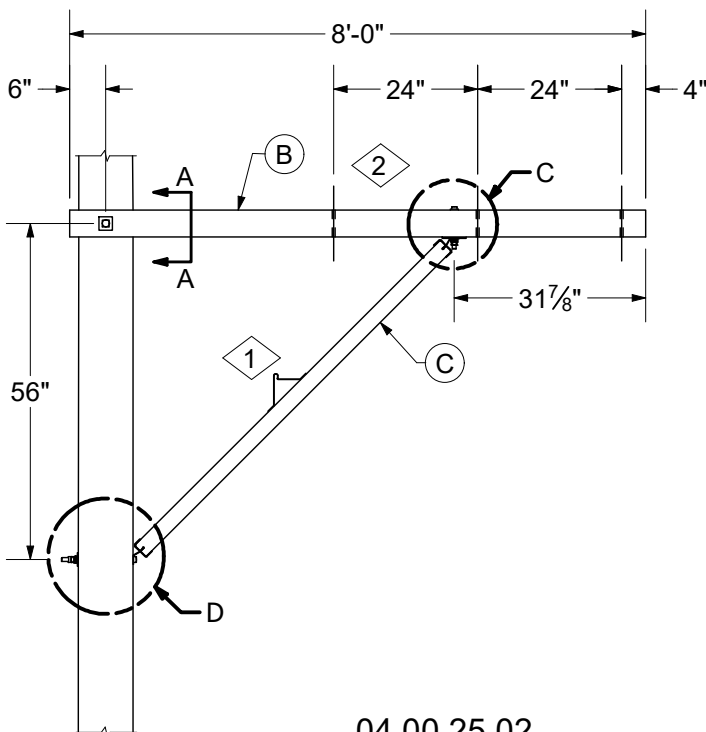
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4	04/12/11	MJ	



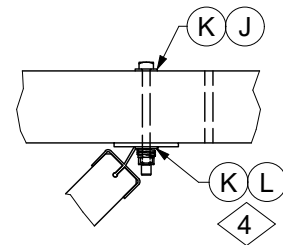
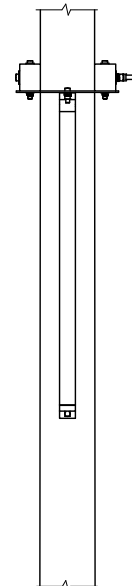
04 00 25 01
6' Double Alley Arm



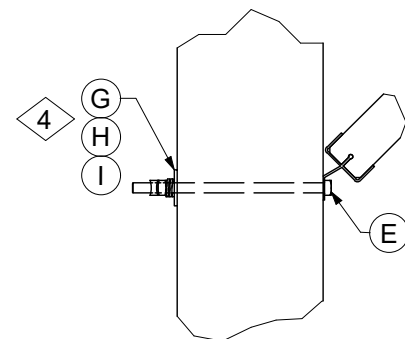
DETAIL B



04 00 25 02
8' Double Alley Arm



DETAIL C



DETAIL D 3



CROSSARMS AND FITTINGS

Wood Double Alley Arm Assembly

04 00 25 **

2 of 2

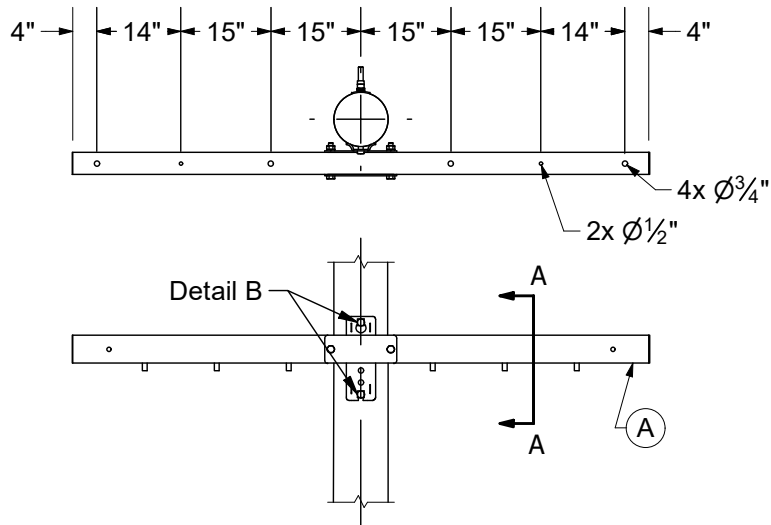
CONSTRUCTION NOTE(s):

1. Heel brace step, Stk. # 23-67-064 is optional and is not shown in material list.
2. Field drill, if required.
3. Always load the non-threaded portion of the bolt with arms and braces.
4. Assemble items in order listed. Square nut provided with bolt is used after double coil washer. Double coil washer not needed on composite poles. Lock nuts must be placed after nut included with bolt stock number.
5. Use longer machine bolts for larger wood or composite poles if required.

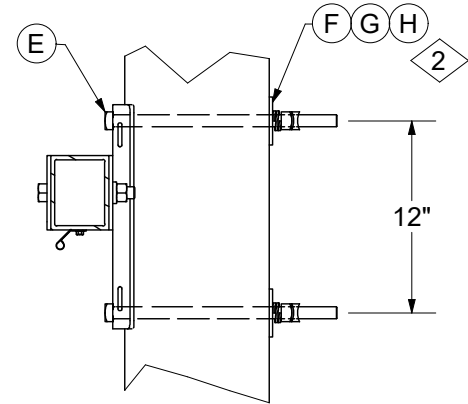
ITEM	STK / DCS #	DESCRIPTION	04 00 25 **	01	02
A	41 01 006	6' Crossarm - 3-1/2" x 4-1/2"		2	-
B	41 01 014	8' Crossarm - 3-1/2" x 4-1/2"		-	2
C	41 56 023	Heel Brace - 6'-0"		1	1
D	23 77 212	Plate Heel Brace - 8-3/4" to 13-3/8"		1	1
E	23 52 065	Bolt, Mach., 5/8" x 12" w/ square nut		1	1
F	23 52 049	Bolt, Mach., 5/8" x 2" w/ square nut		1	1
G	23 66 027	Washer - Square 5/8"		1	1
H	23 66 134	Lock Washer - 5/8" Double Coil		2	2
I	23 65 043	Lock Nut - 5/8" Square		1	1
J	23 52 038	Bolt, Mach., 1/2" x 6" w/ square nut		2	2
K	23 66 017	Washer - Round 1/2"		4	4
L	23 66 133	Lock Washer - Double Coil 1/2"		2	2
M	23 52 118	Bolt, Mach., 3/4" x 20" w/ square nut		1	1
N	23 66 131	Washer, Square, 3/4"		2	2
O	23 66 135	Lock Washer - 3/4" Double Coil		1	1
P	23 65 042	Lock Nut - 3/4" Square		1	1

DISTRIBUTION CONSTRUCTION STANDARDS

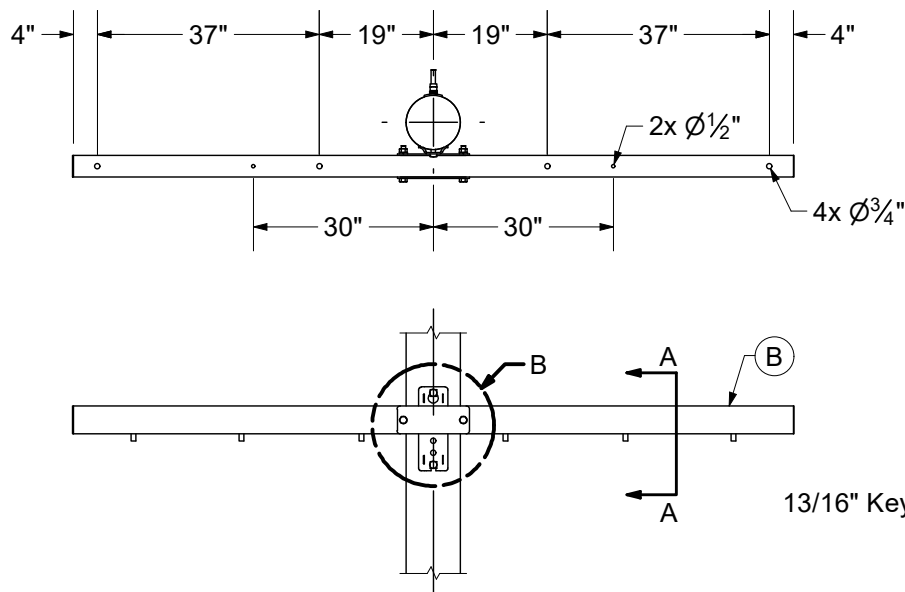
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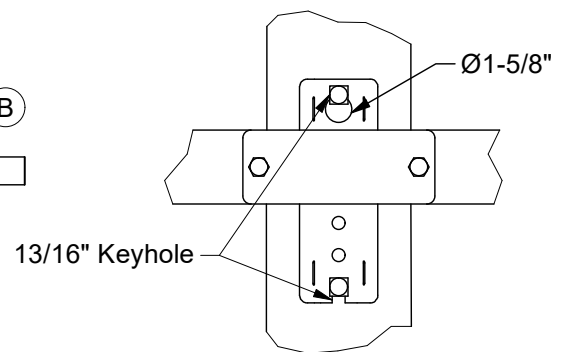
04 00 41 14
8' Tangent



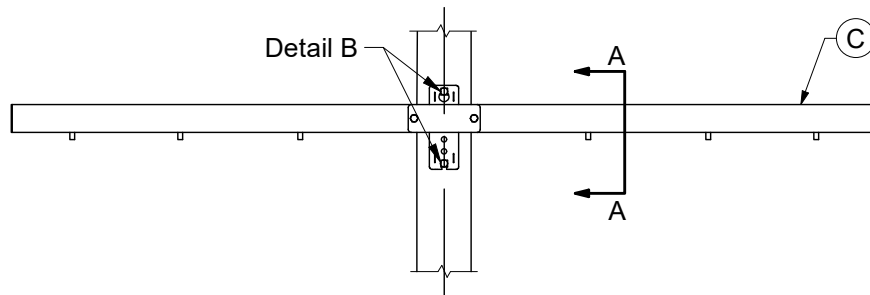
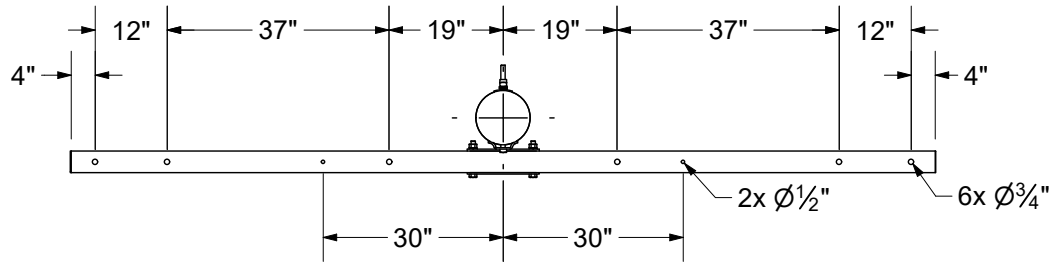
SECTION A-A 5



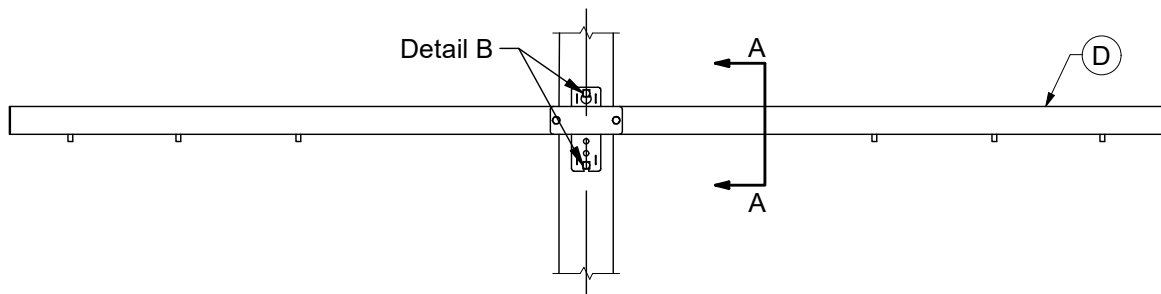
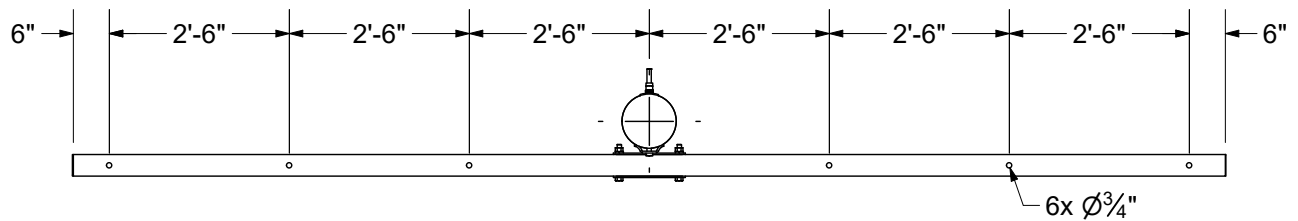
04 00 41 16
10' Tangent



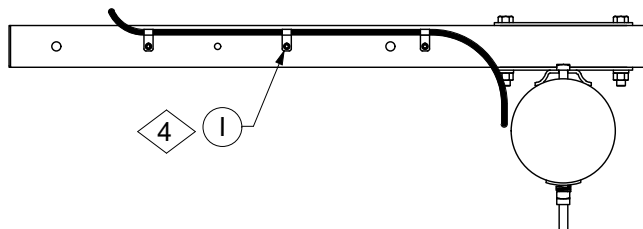
DETAIL B 5



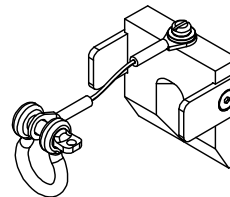
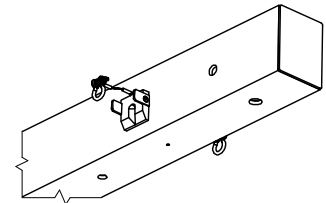
04 00 41 20
12' Tangent



04 00 41 21
16' Tangent



Bottom View



Hot Arm Block 3



CROSSARMS AND FITTINGS

Fiberglass Tangent Assembly

04 00 41 **

3 of 3

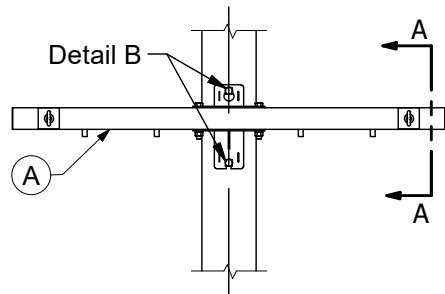
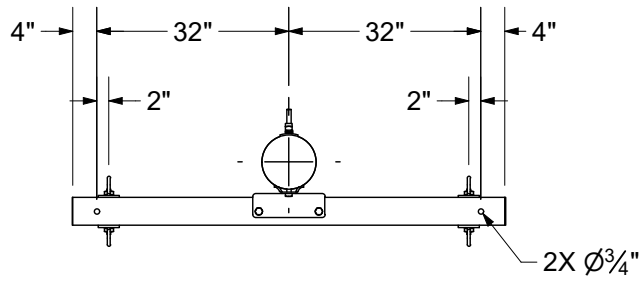
CONSTRUCTION NOTE(s):

1. Unbalanced loads require arm guys.
2. Assemble items in order listed. Square nut provided with bolt is used after double coil washer. Double coil washer not needed on composite poles. Lock nuts must be placed after nut included with bolt stock number.
3. When using fiberglass arms with hot arms a protective block to prevent the pin from fracturing the fiberglass arm is available (Stock #86 06 346).
4. When using a fiberglass arm with different devices a groundwire clip can be used below the arm to train the ground wire to the pole.
5. Always load the non-threaded portion of the bolt with arms and braces.
6. Use longer machine bolts for larger wood or composite poles if required.

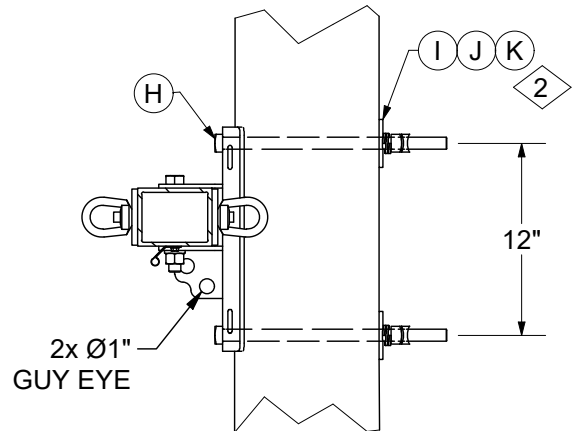
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	B	41 01 285	Crossarm - Tangent, F/G 10'		-	1	-	-
	C	41 01 309	Crossarm - Tangent F/G 12'		-	-	1	-
	D	41 01 312	Crossarm - Tangent F/G 16'		-	-	-	1
	E	23 52 219	Bolt, Mach., 3/4" x 14" w/ square nut		2	2	2	2
	F	23 66 031	Washer, Curved, 3/4"		2	2	2	2
	G	23 66 135	Lock Washer - 3/4" Double Coil		2	2	2	2
	H	23 65 042	Lock Nut - 3/4" Square		2	2	2	2
	I	23 68 746	Grounding Clip Qty. 6		1	1	1	1

DISTRIBUTION CONSTRUCTION STANDARDS

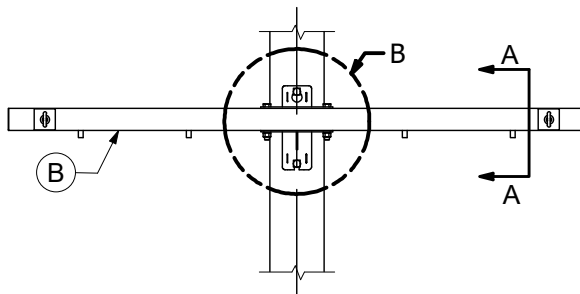
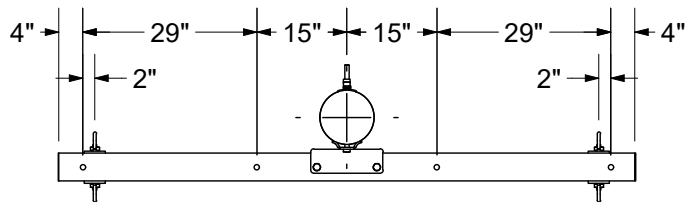
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12	03/10/16	WYW	



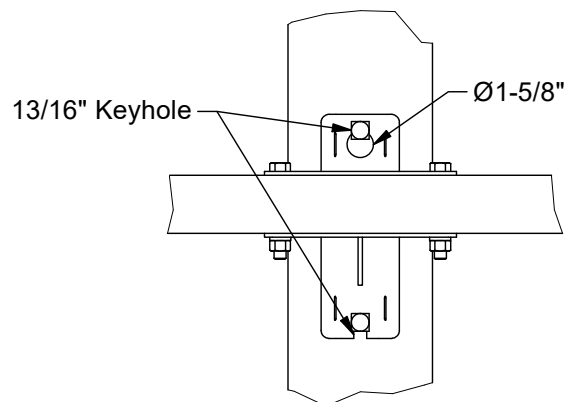
04 00 42 01
6' Deadend



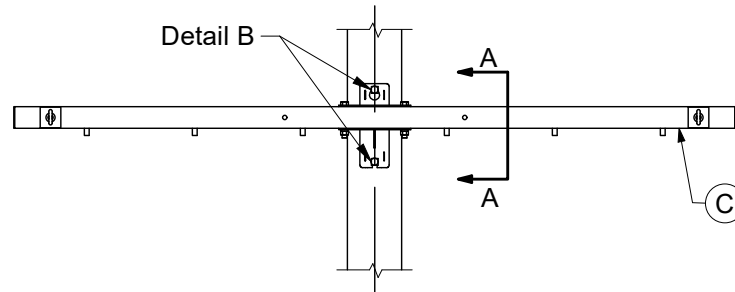
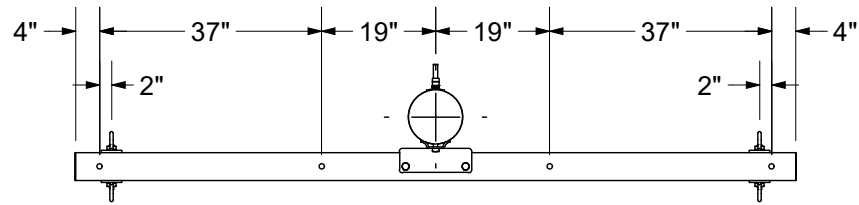
SECTION A-A 5



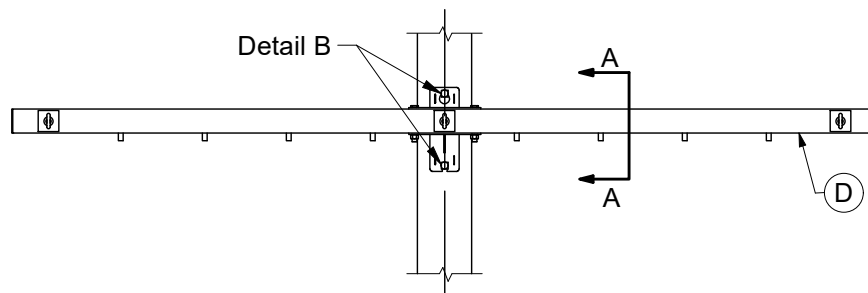
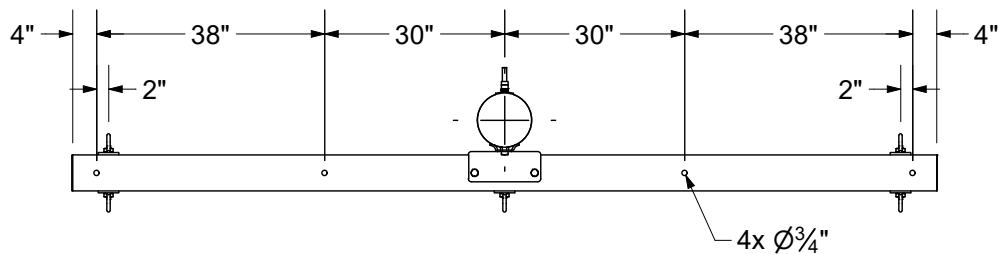
04 00 42 02
8' Deadend



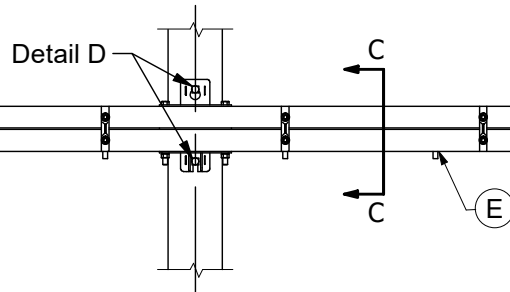
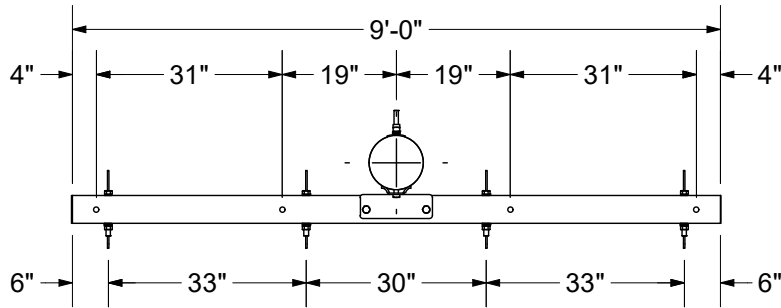
DETAIL B 5



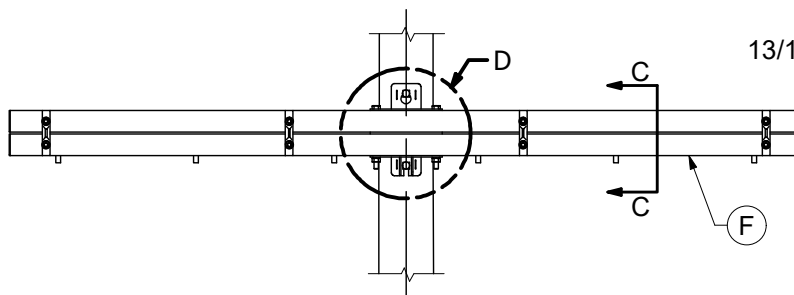
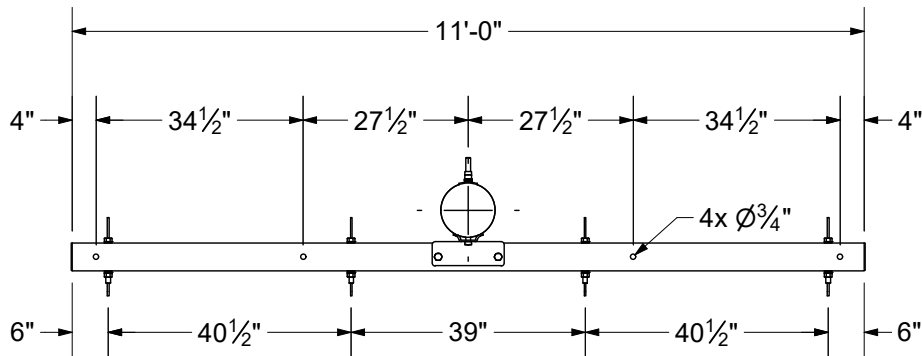
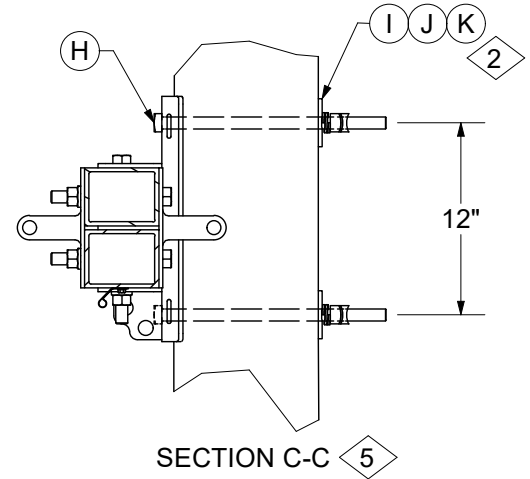
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10' Deadend



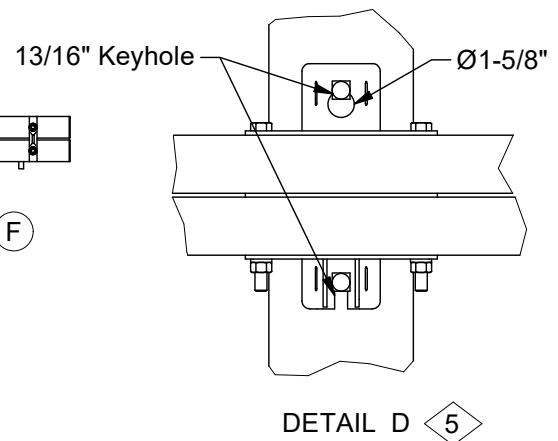
04 00 42 04
12' Deadend

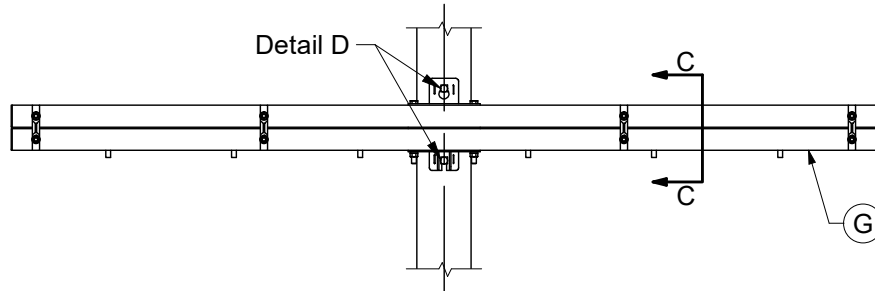
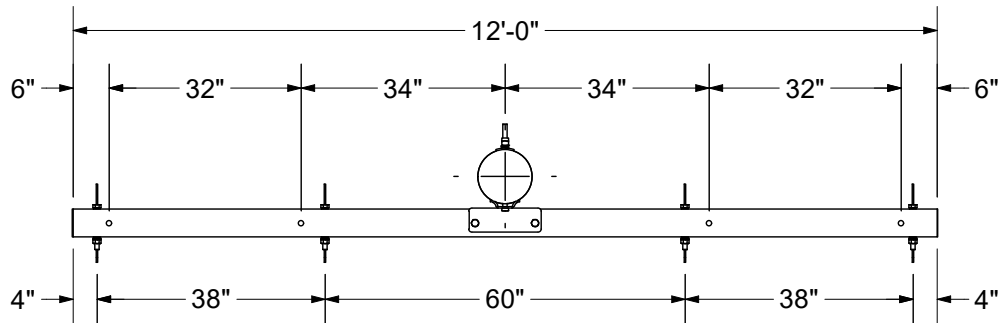


04 00 42 05
9' Double Stack HD Deadend

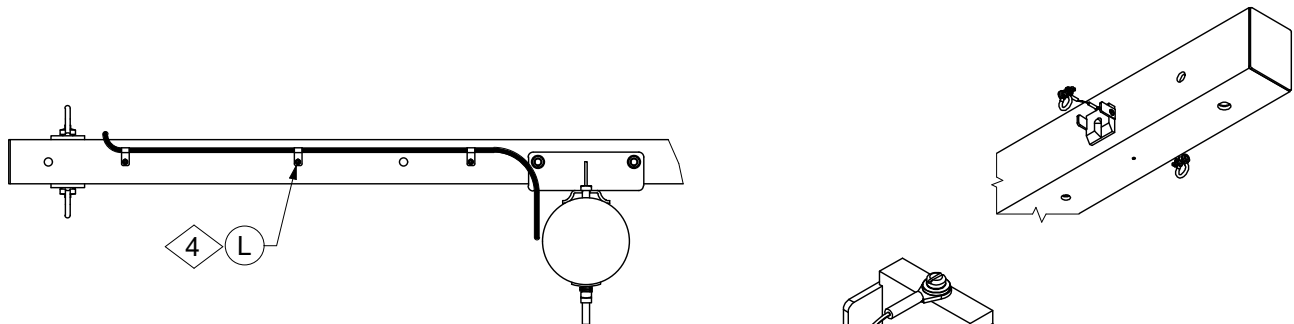


04 00 42 06
11' Double Stack HD Deadend

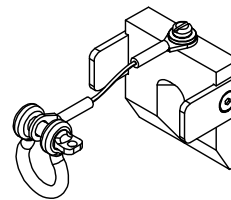




04 00 42 07
12' Double Stack HD Deadend



Bottom View



Hot Arm Block 3



CROSSARMS AND FITTINGS

Fiberglass Deadend Assembly

04 00 42 **

5 of 5

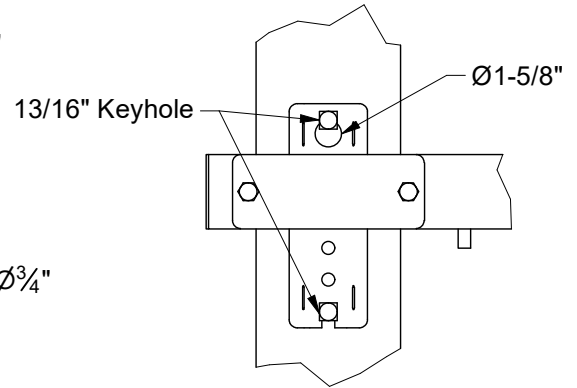
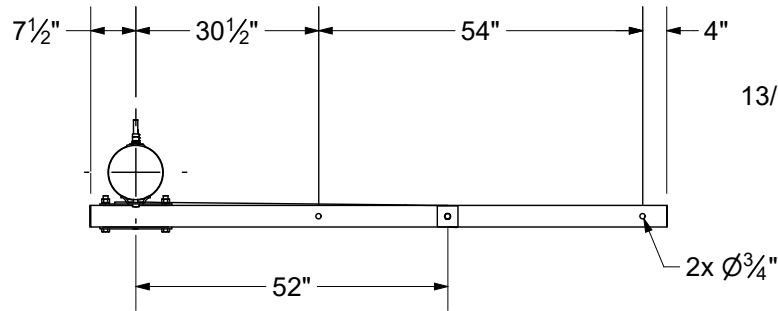
CONSTRUCTION NOTE(s):

1. Unbalanced loads require arm guys.
2. Assemble items in order listed. Square nut provided with bolt is used after double coil washer. Double coil washer not needed on composite poles. Lock nuts must be placed after nut included with bolt stock number.
3. When using fiberglass arms with hot arms a protective block to prevent the pin from fracturing the fiberglass arm is available (Stock #86 06 346).
4. When using a fiberglass arm with different devices a groundwire clip can be used below the arm to train the ground wire to the pole.
5. Always load the non-threaded portion of the bolt with arms and braces.
6. Use longer machine bolts for larger wood or composite poles if required.

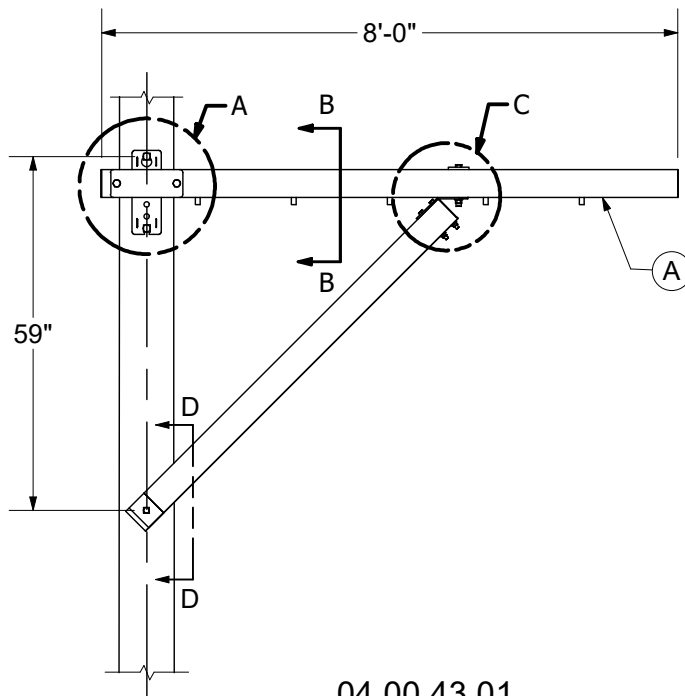
@4	ITEM	STK / DCS #	DESCRIPTION	04 00 42 **	01	02	03	04	05	06	07
	A	41 01 291	Crossarm - Deadend, F/G 6'		1	-	-	-	-	-	-
	B	41 01 189	Crossarm - Deadend, F/G 8'		-	1	-	-	-	-	-
	C	41 01 295	Crossarm - Deadend, F/G 10'		-	-	1	-	-	-	-
	D	41 01 307	Crossarm - Deadend, F/G 12'		-	-	-	1	-	-	-
	E	41 01 301	Crossarm - Double Stack HD Deadend 9'		-	-	-	-	1	-	-
	F	41 01 302	Crossarm - Double Stack HD Deadend 11'		-	-	-	-	-	1	-
	G	41 01 308	Crossarm - Double Stack HD Deadend 12'		-	-	-	-	-	-	1
	H	23 52 219	Bolt, Mach., 3/4" x 14" w/ square nut		2	2	2	2	2	2	2
	I	23 66 031	Washer, Curved, 3/4"		2	2	2	2	2	2	2
	J	23 66 135	Lock Washer - 3/4" Double Coil		2	2	2	2	2	2	2
	K	23 65 042	Lock Nut - 3/4" Square		2	2	2	2	2	2	2
	L	23 68 746	Grounding Clip Qty. 6		1	1	1	2	1	1	1

DISTRIBUTION CONSTRUCTION STANDARDS

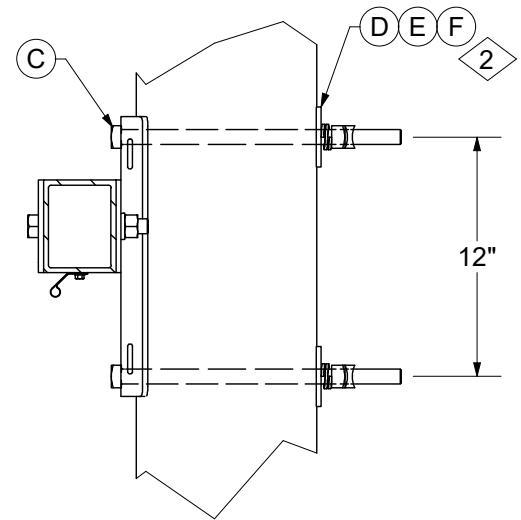
REV	DATE	ENG	DESCRIPTION
0	01/01/21	KR	New Issued Standard



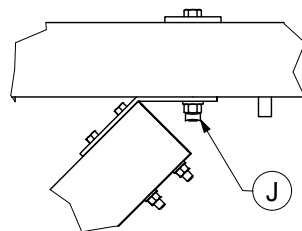
DETAIL A 5



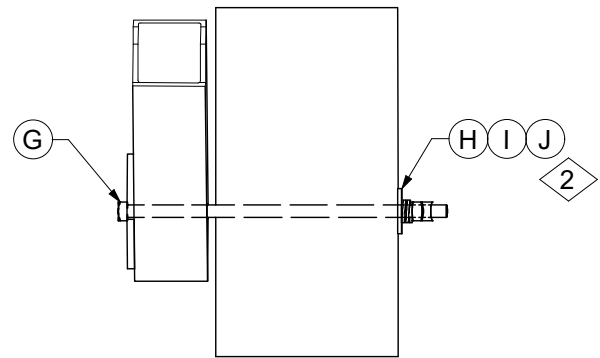
04 00 43 01
8' Alley Arm



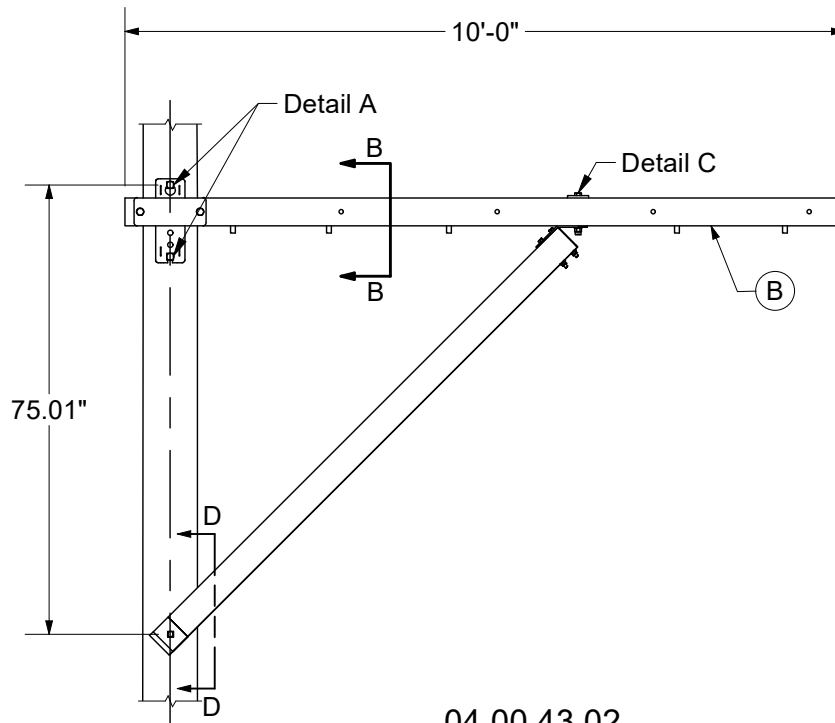
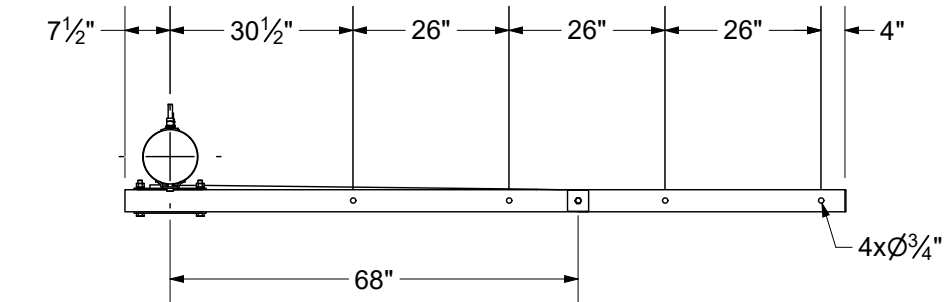
SECTION B-B 5



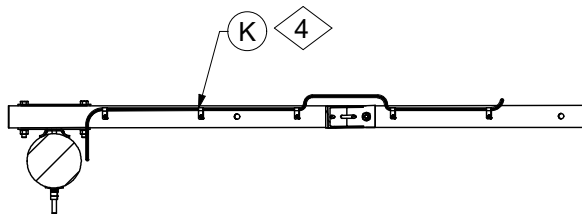
DETAIL C



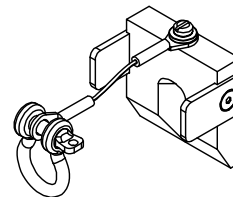
SECTION D-D 5



04 00 43 02
10' Alley Arm



Bottom View



Hot Arm Block 3



CROSSARMS AND FITTINGS

Fiberglass Alley Arm Assembly

04 00 43 **

3 of 3

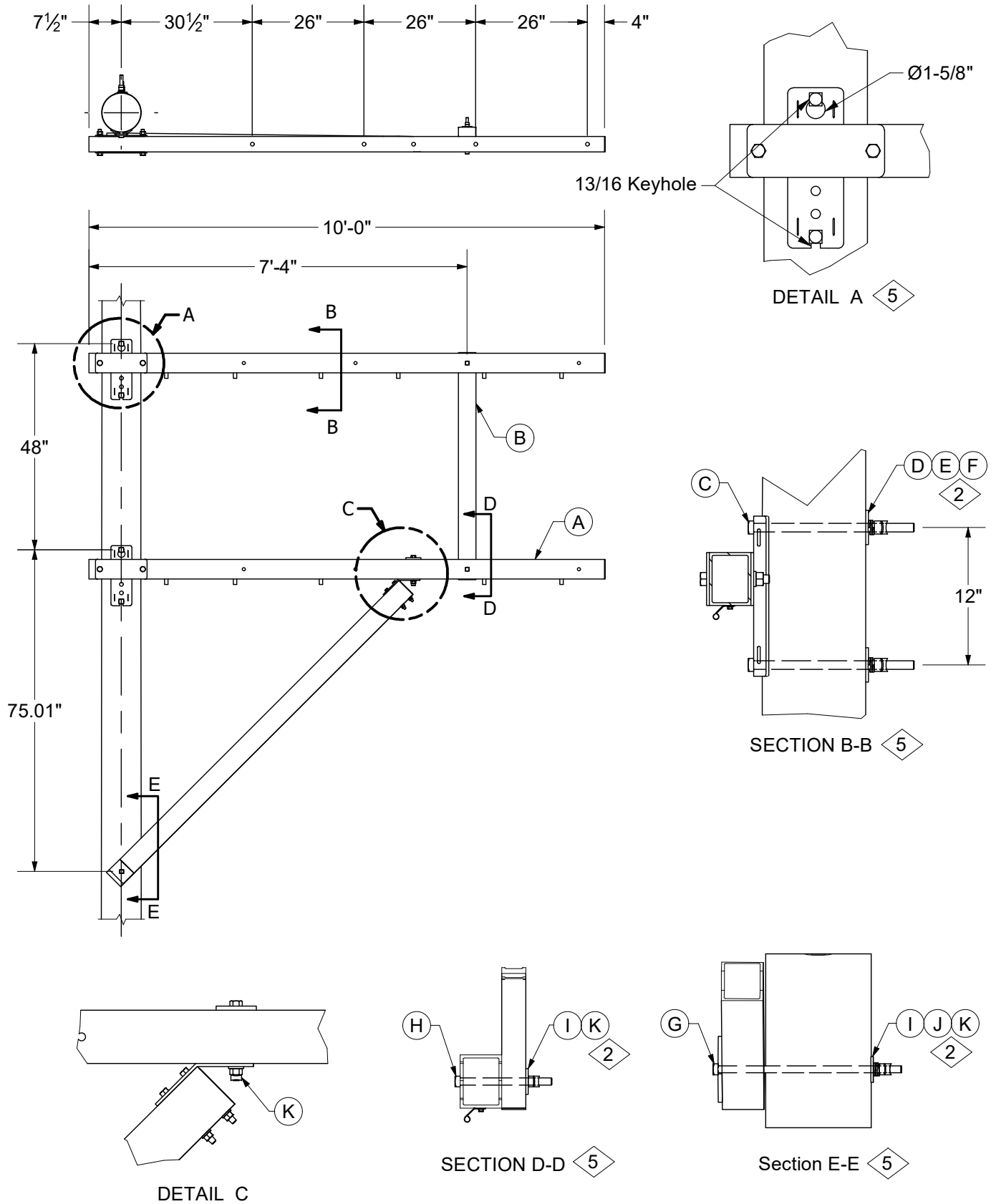
CONSTRUCTION NOTE(s):

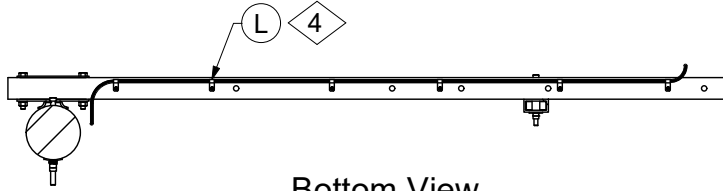
1. Unbalanced loads require arm guys.
2. Assemble items in order listed. Square nut provided with bolt is used after double coil washer. Double coil washer not needed on composite poles. Lock nuts must be placed after nut included with bolt stock number.
3. When using fiberglass arms with hot arms a protective block to prevent the pin from fracturing the fiberglass arm is available (Stock #86 06 346).
4. When using a fiberglass arm with different devices a groundwire clip can be used below the arm to train the ground wire to the pole.
5. Always load the non-threaded portion of the bolt with arms and braces.
6. Use longer machine bolts for larger wood or composite poles if required.

@4	ITEM	STK / DCS #	DESCRIPTION	04 00 43 **	01	02
	A	41 01 293	Crossarm - Alley, F/G 8'		1	-
	B	41 01 294	Crossarm - Alley, F/G 10'		-	1
	C	23 52 219	Bolt, Mach., 3/4" x 14" w/ square nut		2	2
	D	23 66 031	Washer, Curved, 3/4"		2	2
	E	23 66 135	Lock Washer - 3/4" Double Coil		2	2
	F	23 65 042	Lock Nut - 3/4" Square		2	2
	G	23 52 068	Bolt, Mach., 5/8" x 16" w/ square nut		1	1
	H	23 66 027	Washer - Square 5/8"		1	1
	I	23 66 134	Lock Washer - 5/8" Double Coil		1	1
	J	23 65 043	Lock Nut - 5/8" Square		2	2
	K	23 68 746	Grounding Clip Qty. 6		1	1

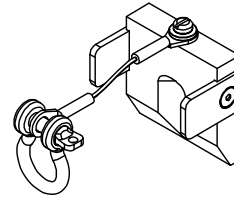
DISTRIBUTION CONSTRUCTION STANDARDS

REV	DATE	ENG	DESCRIPTION
0	01/01/21	KR	New Issued Standard





Bottom View



Hot Arm Block 3

CONSTRUCTION NOTE(s):

1. Unbalanced loads require arm guys.
2. Assemble items in order listed. Square nut provided with bolt is used after double coil washer. Double coil washer not needed on composite poles. Lock nuts must be placed after nut included with bolt stock number.
3. When using fiberglass arms with hot arms a protective block to prevent the pin from fracturing the fiberglass arm is available (Stock #86 06 346).
4. When using a fiberglass arm with different devices a groundwire clip can be used below the arm to train the ground wire to the pole.
5. Always load the non-threaded portion of the bolt with arms and braces.
6. Use longer machine bolts for larger wood or composite poles if required.

@4	ITEM	STK / DCS #	DESCRIPTION	04 00 44 **	01
	A	41 01 294	Crossarm - Alley, F/G 10'		2
	B	41 01 314	Crossarm - Alley Arm Brace F/G		1
	C	23 52 219	Bolt, Mach., 3/4" x 14" w/ square nut		4
	D	23 66 031	Washer, Curved, 3/4"		4
	E	23 66 135	Lock Washer - 3/4" Double Coil		4
	F	23 65 042	Lock Nut - 3/4" Square		4
	G	23 52 068	Bolt, Mach., 5/8" x 16" w/ square nut		1
	H	23 52 061	Bolt, Mach., 5/8" x 8" w/ square nut		2
	I	23 66 027	Washer - Square 5/8"		3
	J	23 66 134	Lock Washer - 5/8" Double Coil		1
	K	23 65 043	Lock Nut - 5/8" Square		4
	L	23 68 746	Grounding Clip Qty. 6		2