

69kV INSULATOR PLATE INDEX

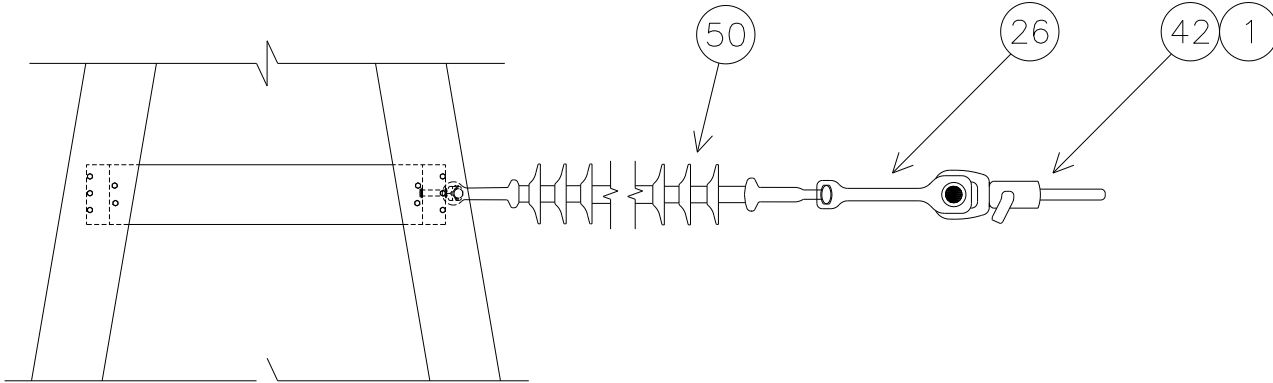
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IASDFA3

INSULATOR FOR SUBSTATION A-FRAME/LATTICE STRUCTURES
 SINGLE DEAD-END, FULL TENSION, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 954S, 1590



IASDFA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
1	ADCVF 001	3	VOID FILLER COMPOUND FOR DEADEND ASSEMBLY
26	CLEHL 005	3	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8, H. D. G.
50	INSD 004	3	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11

IASDFA3*954S

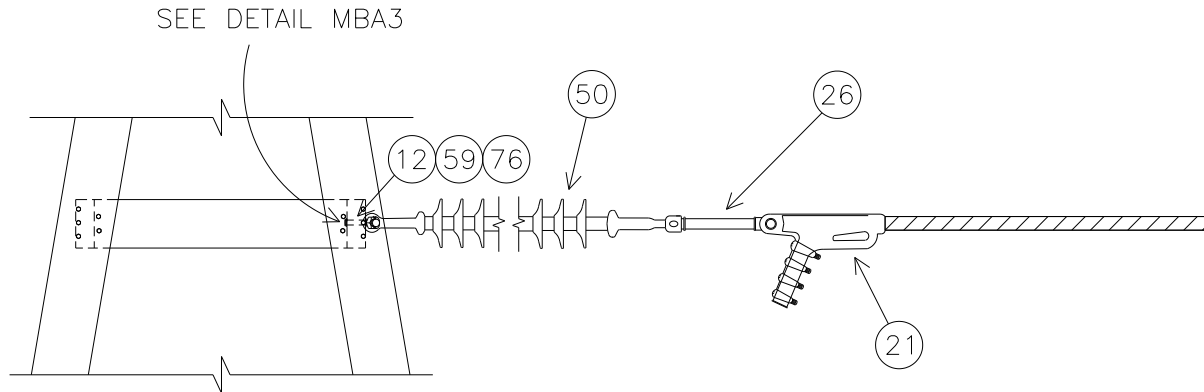
NO.	ITEM ID	QTY	DESCRIPTION
42	DEACB 005	3	DEADEND COMPRESSION ASSEMBLY FOR 954 ACSR, OVAL EYE

IASDFA3*1590

NO.	ITEM ID	QTY	DESCRIPTION
42	DEACB 007	3	DEADEND COMPRESSION ASSEMBLY FOR 1590 ACSR, OVAL EYE

IASDSA3

INSULATOR FOR SUBSTATION A-FRAME/LATTICE STRUCTURES
 SINGLE DEAD-END, SLACK TENSION, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 556S, 954A, 954S, 1590



IASDSA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 016	3	MACHINE BOLT, 5/8" X 3", SQUARE HEAD, GALVANIZED, W/SQUARE NUT ATTACHED
26	CLEHL 008	3	SOCKET-EYE CLEVIS, CLASS 52-8/11, L = 10", EYE = 3/4" THICK WITH 13/16" OPENING, H. D. G.
50	INSDE 004	3	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
59	NUTEY 002	3	EYE NUT FOR 5/8" BOLT, 1 1/2" OPENING, H.D.G.
76	WASRD 004	6	ROUND WASHER FOR 5/8" BOLT, 1 3/4" DIAMETER, GALVANIZED

IASDSA3*556S, 954A, 954S

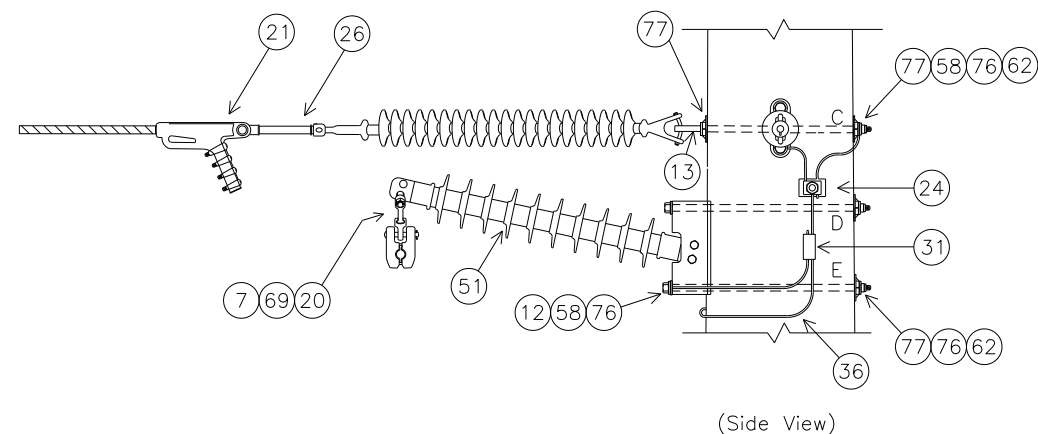
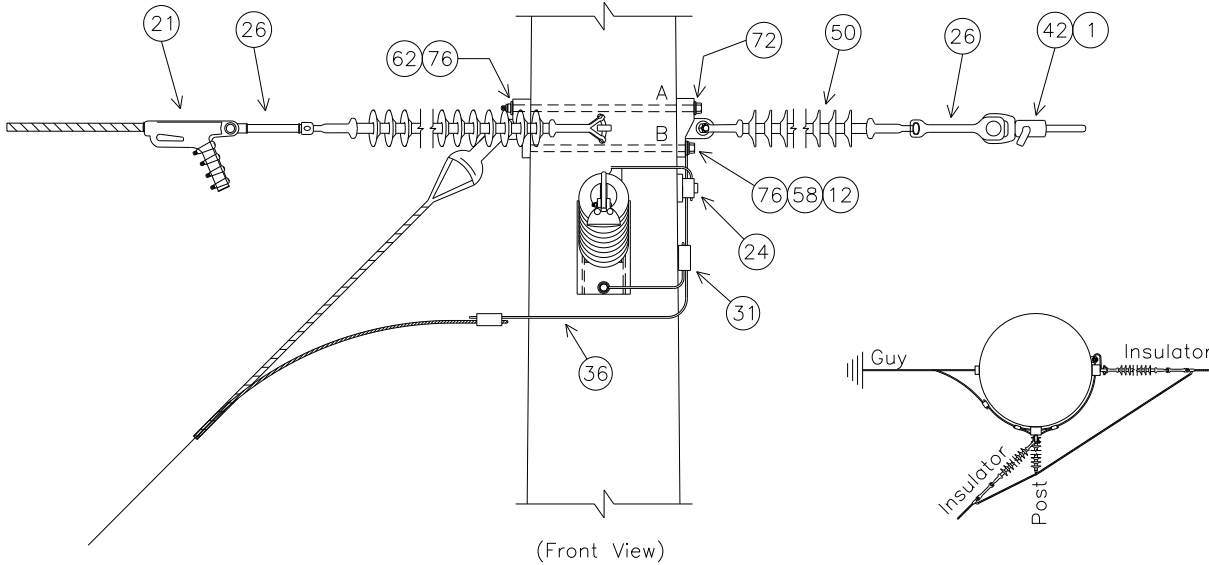
NO.	ITEM ID	QTY	DESCRIPTION
21	CLAQD 005	3	DEADEND CLAMP (.7 - 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"

IASDSA3*1590

NO.	ITEM ID	QTY	DESCRIPTION
21	CLAQD 006	3	DEADEND CLAMP (1.18 - 1.52") 35,000# STRENGTH, GAP = 2", PIN = 3/4"

ISDD3FSA3

INSULATOR FOR SPUN CONCRETE POLES
DOUBLE DEADEND 135, FULL TENSION TO SLACK TENSION, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 954S, 1590



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

	SECTION		
	TOP	MIDDLE	BOTTOM
BOLT 'A' LENGTH (INCHES)	24.3	25.8	27.3
BOLT 'B' LENGTH (INCHES)	22.7	24.2	25.7
SHOULDER EYEBOLT 'C' LENGTH (INCHES)	21.6	23.1	24.6
BOLT 'D' LENGTH (INCHES)	27.2	28.8	30.3
BOLT 'E' LENGTH (INCHES)	27.7	29.2	30.7

NOTE: BOLT CALCULATIONS ASSUME A 17" POLE TOP DIAMETER

ISDD3FSA3 PLATES

ISDD3FSA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
1	ADCVF 001	3	VOID FILLER COMPOUND FOR DEADEND ASSEMBLY
7	BALFI007	3	BALL Y-CLEVIS, CLASS 52-3/5
12	BOLMS 055	2	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 073	2	MACHINE BOLT, 7/8" X 30", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 074	2	MACHINE BOLT, 7/8" X 32", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
13	BOLSE 021	1	BOLT, SHOULDER EYE, 7/8" X 22", GALVANIZED, WITH SQUARE NUT ATTACHED
13	BOLSE 022	1	BOLT, SHOULDER EYE, 7/8" X 24", GALVANIZED, WITH SQUARE NUT ATTACHED
13	BOLSE 023	1	BOLT, SHOULDER EYE, 7/8" X 26", GALVANIZED, WITH SQUARE NUT ATTACHED
24	CLATG 001	3	CLAMP, TRANSFORMER TANK GROUND, BRONZE, #6 SOL - #1 STR
26	CLEHL 005	3	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8", H.D.G.
26	CLEHL 008	3	SOCKET-EYE CLEVIS, CLASS 52-8/11, L = 10", EYE = 3/4" THICK WITH 13/16" OPENING, H. D. G.
31	CNNCP 016	3	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	21 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
50	INSD 004	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
51	INSHP 020	3	HORIZONTAL POST SILICONE INSULATOR, 69KV, L = 45", GAIN BASE, 12° RISE
58	LUGGR 002	6	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
62	NUTSL 005	9	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
69	SOCEY003	3	SOCKET EYE, CLASS 52-3/5
72	TEEDE 003	6	TEE, DUCTILE IRON, H.D.G., 6" HOLE SPACING, STRENGTH = 60,000#
76	WASRD 006	15	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 002	12	FLAT CURVED WASHER FOR 3/4" & 7/8" BOLT, 4" SQ X 1/4", GALVANIZED

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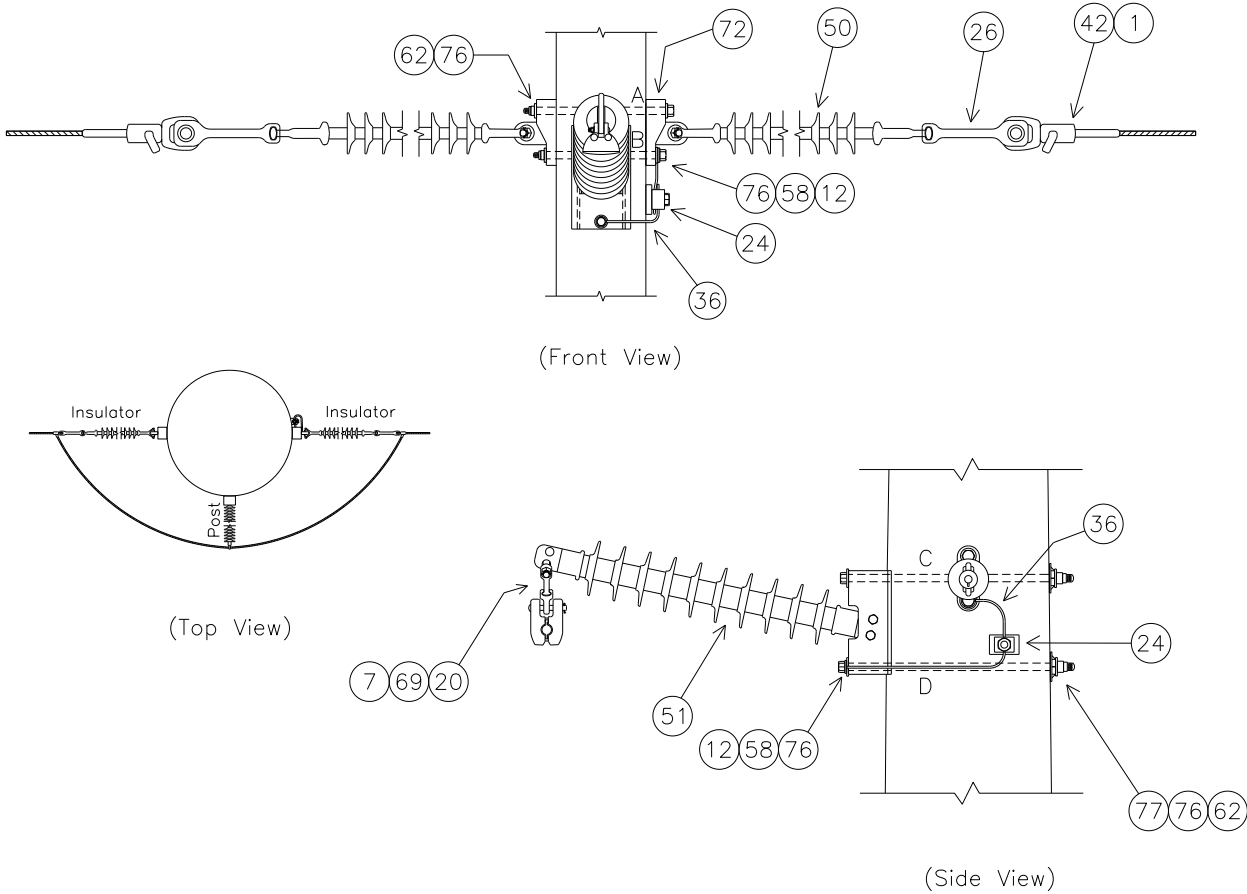
NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 053	1	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 054	4	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 055	1	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
20	CLAJU 007	3	CUSHION GRIP SUSPENSION CLAMP FOR 954 ACSR
21	CLAQD 005	3	DEADEND CLAMP (.7 - 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"
42	DEACB 005	3	DEADEND COMPRESSION ASSEMBLY FOR 954 ACSR, OVAL EYE
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISDD3FSA3*1590

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 063	1	MACHINE BOLT, 1" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 064	4	MACHINE BOLT, 1" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 070	1	MACHINE BOLT, 1" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
20	CLAJU 008	3	CUSHION GRIP SUSPENSION CLAMP FOR 1590 ACSR
21	CLAQD 006	3	DEADEND CLAMP (1.18 - 1.52") 35,000# STRENGTH, GAP = 2", PIN = 3/4"
42	DEACB 007	3	DEADEND COMPRESSION ASSEMBLY FOR 1590 ACSR, OVAL EYE
58	LUGGR 003	3	LUG FOR 1" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 006	6	SQUARE LOCK NUT FOR 1" BOLT, H.D.G.
76	WASRD 007	12	ROUND WASHER FOR 1" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISDD8FFA3

INSULATOR FOR SPUN CONCRETE POLES
DOUBLE DEAD-END 180, FULL TENSION TO FULL TENSION, 69KV, 3-PHASE
CONDUCTOR OPTIONS: 556S, 954S, 1590



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

DEADEND INSULATOR	TOP	MIDDLE	BOTTOM
UPPER BOLT 'A' LENGTH (INCHES)	24.3	25.8	27.3
LOWER BOLT 'B' LENGTH (INCHES)	22.7	24.2	25.7

POST INSULATOR	TOP	MIDDLE	BOTTOM
UPPER BOLT 'C' LENGTH (INCHES)	27.0	28.5	30.1
LOWER BOLT 'D' LENGTH (INCHES)	27.5	29.0	30.5

NOTE: BOLT CALCULATIONS ASSUME A 17" POLE TOP DIAMETER

ISDD8FFA3 PLATES

ISDD8FFA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
1	ADCVF 001	6	VOID FILLER COMPOUND FOR DEADEND ASSEMBLY
7	BALF007	3	BALL Y-CLEVIS, CLASS 52-3/5
12	BOLMS 055	2	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 073	2	MACHINE BOLT, 7/8" X 30", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 074	2	MACHINE BOLT, 7/8" X 32", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
24	CLATG 001	3	CLAMP, TRANSFORMER TANK GROUND, BRONZE, #6 SOL - #1 STR
36	COBCO 028	12 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
51	INSHP 020	3	HORIZONTAL POST INSULATOR, 69KV, L = 45", GAIN BASE, 12° RISE
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
69	SOCEY003	3	SOCKET EYE, CLASS 52-3/5
72	TEEDE 003	6	TEE, DUCTILE IRON, H.D.G., 6" HOLE SPACING, STRENGTH = 60,000#
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 002	6	SQUARE CURVED WASHER FOR 7/8" BOLTS, GALVANIZED, 4" X 4" SIZE

ISDD8FFA3*556S

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 053	1	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 054	4	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 055	1	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
20	CLAJU 005	3	CUSHION GRIP SUSPENSION CLAMP FOR 556 ACSR
26	CLEHL 004	6	SOCKET-Y CLEVIS, CLASS 52-3/5, L = 11", PIN = 7/8", H.D.G.
42	DEACB 003	6	DEADEND COMPRESSION ASSEMBLY FOR 556 ACSR, OVAL EYE
50	INSSU 008	6	SUSPENSION SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-3/5
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISDD8FFA3*954S

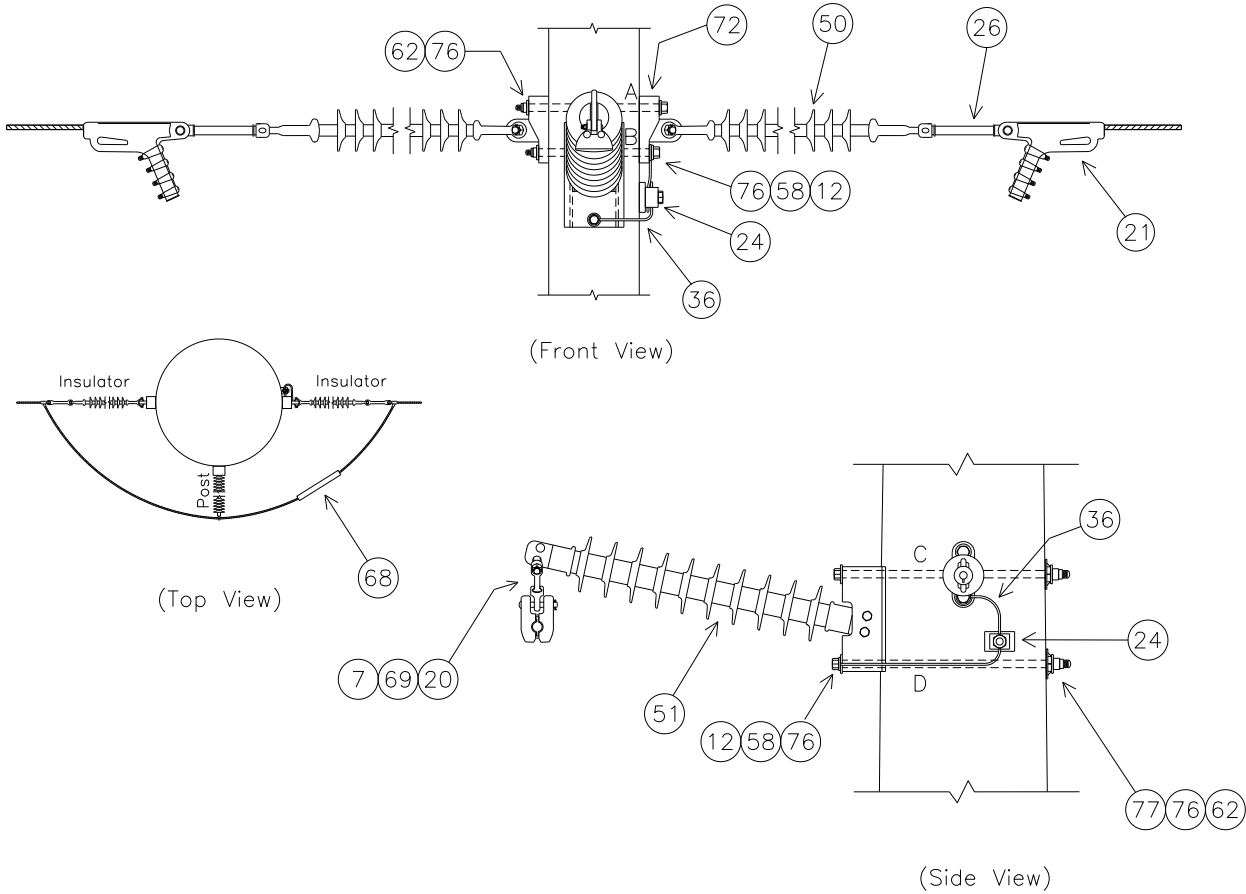
NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 053	1	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 054	4	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 055	1	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
20	CLAJU 007	3	CUSHION GRIP SUSPENSION CLAMP FOR 954 ACSR
26	CLEHL 005	6	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8", H.D.G.
42	DEACB 005	6	DEADEND COMPRESSION ASSEMBLY FOR 954 ACSR, OVAL EYE
50	INSDE 004	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISDD8FFA3*1590

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 063	1	MACHINE BOLT, 1" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 064	4	MACHINE BOLT, 1" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 070	1	MACHINE BOLT, 1" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
26	CLEHL 005	6	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8", H.D.G.
20	CLAJU 008	3	CUSHION GRIP SUSPENSION CLAMP FOR 1590 ACSR
42	DEACB 007	6	DEADEND COMPRESSION ASSEMBLY FOR 1590 ACSR, OVAL EYE
50	INSDE 004	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
58	LUGGR 003	3	LUG FOR 1" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 006	6	SQUARE LOCK NUT FOR 1" BOLT, H.D.G.
76	WASRD 007	12	ROUND WASHER FOR 1" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISDD8SSA3

INSULATOR FOR SPUN CONCRETE POLES
DOUBLE DEAD-END 180, SLACK TENSION TO SLACK TENSION, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 556S, 954A, 954S, 1590



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

DEADEND INSULATOR	TOP	MIDDLE	BOTTOM
UPPER BOLT 'A' LENGTH (INCHES)	24.2	25.7	27.2
LOWER BOLT 'B' LENGTH (INCHES)	22.6	24.1	25.6

POST INSULATOR	TOP	MIDDLE	BOTTOM
UPPER BOLT 'C' LENGTH (INCHES)	27.0	28.5	30.1
LOWER BOLT 'D' LENGTH (INCHES)	27.5	29.0	30.5

NOTE: BOLT CALCULATIONS ASSUME A 17" POLE TOP DIAMETER

ISDD8SSA3 PLATES

ISDD8SSA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
7	BALFI 007	3	BALL Y-CLEVIS, CLASS 52-3/5
12	BOLMS 053	1	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 054	4	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 055	3	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 073	2	MACHINE BOLT, 7/8" X 30", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 074	2	MACHINE BOLT, 7/8" X 32", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
24	CLATG 001	3	CLAMP, TRANSFORMER TANK GROUND, BRONZE, #6 SOL - #1 STR
26	CLEHL 008	6	SOCKET-EYE CLEVIS, CLASS 52-8/11, L = 10", EYE = 3/4" THICK WITH 13/16" OPENING, H. D. G.
36	COBCO 028	12 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
50	INSD 004	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
51	INSHP 020	3	HORIZONTAL POST INSULATOR, 69KV, L = 45", GAIN BASE, 12° RISE
58	LUGGR 002	6	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
62	NUTSL 005	12	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
69	SOCEY 003	3	SOCKET EYE, CLASS 52-3/5
72	TEEDE 003	6	TEE, DUCTILE IRON, H.D.G., 6" HOLE SPACING, STRENGTH = 60,000#
76	WASRD 006	24	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 002	6	SQUARE CURVED WASHER FOR 7/8" BOLTS, GALVANIZED, 4" X 4" SIZE

ISDD8SSA3*556S

NO.	ITEM ID	QTY	DESCRIPTION
20	CLAJU 005	3	CUSHION GRIP SUSPENSION CLAMP FOR 556 ACSR
21	CLAQD 005	6	DEADEND CLAMP (.7 - 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"
68	SLEAJ 003	3	ALUM. SLEEVE JUMPER FOR 556 ACSR, COMPRESSION SPLICE, NON-TENSION ONLY

ISDD8SSA3*954A

NO.	ITEM ID	QTY	DESCRIPTION
20	CLAJU 006	3	CUSHION GRIP SUSPENSION CLAMP FOR 954 AAC
21	CLAQD 005	6	DEADEND CLAMP (.7 - 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"
68	SLEAJ 006	3	ALUM. SLEEVE JUMPER FOR 954 AAC 61, COMPRESSION SPLICE, NON-TENSION ONLY

ISDD8SSA3*954S

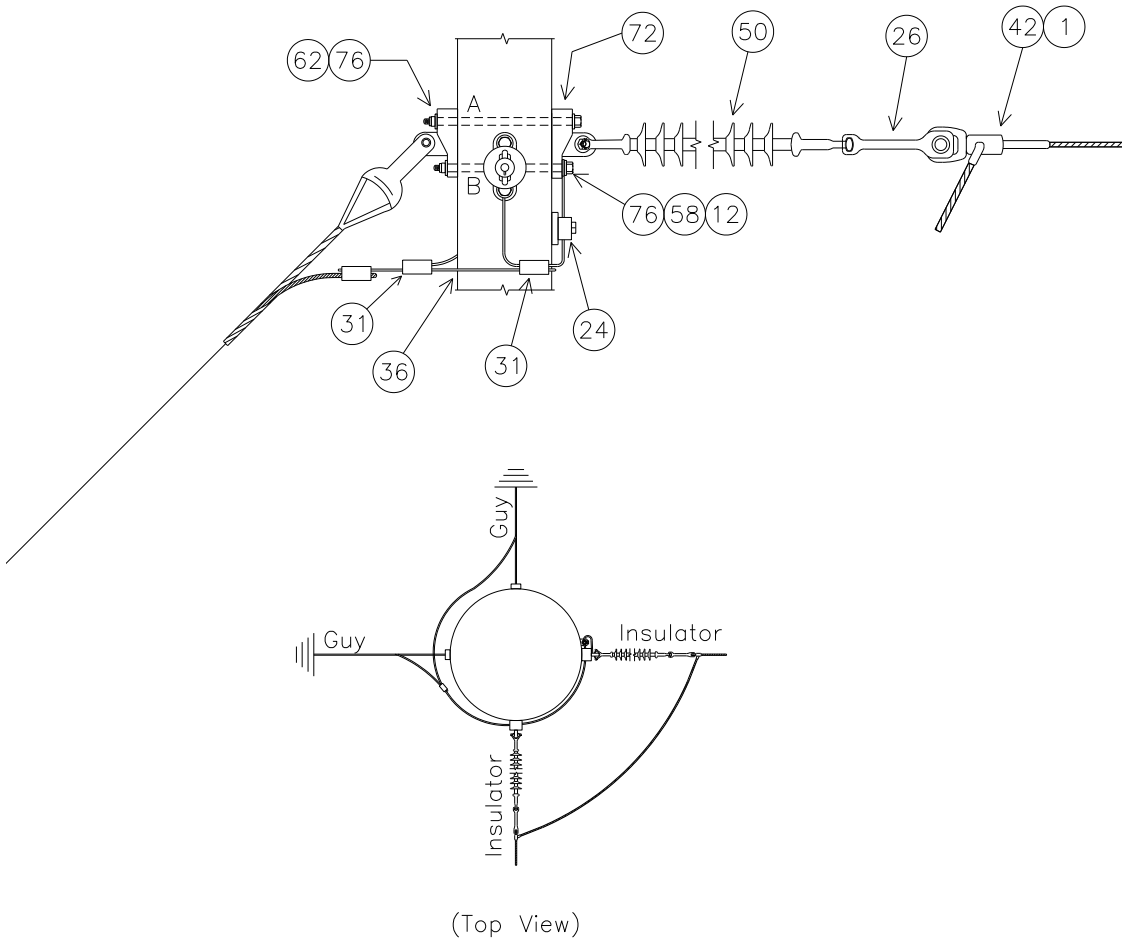
NO.	ITEM ID	QTY	DESCRIPTION
20	CLAJU 007	3	CUSHION GRIP SUSPENSION CLAMP FOR 954 ACSR
21	CLAQD 005	6	DEADEND CLAMP (.7 - 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"
68	SLEAJ 005	3	ALUM. SLEEVE JUMPER FOR 954 ACSR 54/7, COMPRESSION SPLICE, NON-TENSION ONLY

ISDD8SSA3*1590

NO.	ITEM ID	QTY	DESCRIPTION
20	CLAJU 008	3	CUSHION GRIP SUSPENSION CLAMP FOR 1590 ACSR
21	CLAQD 006	6	DEADEND CLAMP (1.18 - 1.52") 35,000# STRENGTH, GAP = 2", PIN = 3/4"
68	SLEAJ 007	3	ALUM. SLEEVE JUMPER FOR 1590 ACSR 54/19, COMPRESSION SPLICE, NON-TENSION ONLY

ISDD9FFA1

INSULATOR FOR SPUN CONCRETE POLES
DOUBLE DEAD-END 90, FULL TENSION TO FULL TENSION, 69KV, 1-PHASE
 CONDUCTOR OPTIONS: 556S, 954S, 1590



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

WITHOUT SHIELD	'A'	'B'
UPPER TEE MINIMUM BOLT LENGTH (INCHES)	22.8	21.2
LOWER TEE MINIMUM BOLT LENGTH (INCHES)	22.9	21.2

NOTE: BOLT CALCULATIONS ASSUME A 17" POLE TOP DIAMETER

ISDD9FFA1

ISDD9FFA1 BASE

NO.	ITEM ID	QTY	DESCRIPTION
1	ADCVF 001	2	VOID FILLER COMPOUND FOR DEADEND ASSEMBLY
24	CLATG 001	1	CLAMP, TRANSFORMER TANK GROUND, BRONZE, #6 SOL - #1 STR
31	CNNCP 016	2	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	6 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
72	TEEDE 003	4	TEE, DUCTILE IRON, H.D.G., 6" HOLE SPACING, STRENGTH = 60,000#

ISDD9FFA1*556S

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 052	2	MACHINE BOLT, 7/8" X 22", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 053	2	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
26	CLEHL 004	2	SOCKET-Y CLEVIS, CLASS 52-3/5, L = 11", PIN = 7/8", H.D.G.
42	DEACB 003	2	DEADEND COMPRESSION ASSEMBLY FOR 556 ACSR, OVAL EYE
50	INSSU008	2	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-3/5
58	LUGGR 002	2	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	4	SQUARE LOCK NUT FOR 7/8 INCH BOLT, HOT DIPPED GALVANIZED
76	WASRD 006	8	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISDD9FFA1*954S

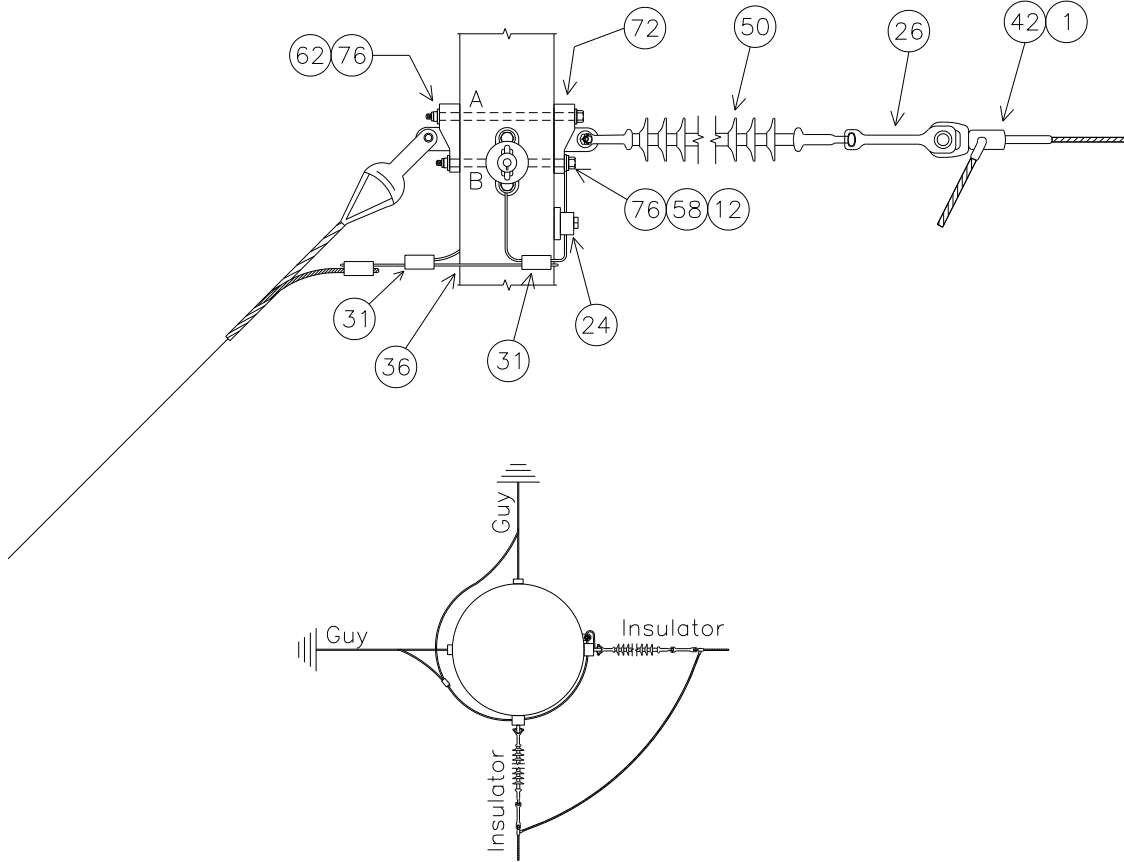
NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 052	2	MACHINE BOLT, 7/8" X 22", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 053	2	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
26	CLEHL 005	2	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8", H.D.G.
42	DEACB 005	2	DEADEND COMPRESSION ASSEMBLY FOR 954 ACSR, OVAL EYE
50	INSDE 004	2	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
58	LUGGR 002	2	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	4	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
76	WASRD 006	8	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISDD9FFA1*1590

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 062	2	MACHINE BOLT, 1" X 22", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 063	2	MACHINE BOLT, 1" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
26	CLEHL 005	2	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8", H.D.G.
42	DEACB 007	2	DEADEND COMPRESSION ASSEMBLY FOR 1590 ACSR, OVAL EYE
50	INSDE 004	2	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
58	LUGGR 003	2	LUG FOR 1" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 006	4	SQUARE LOCK NUT FOR 1" BOLT, H.D.G.
76	WASRD 007	8	ROUND WASHER FOR 1" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISDD9FFA3

INSULATOR FOR SPUN CONCRETE POLES
DOUBLE DEAD-END 90, FULL TENSION TO FULL TENSION, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 556S, 954S, 1590



(Top View)

NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	UPPER TEE			LOWER TEE		
	Top	Mid	Bottom	Top	Mid	Bottom
UPPER BOLT 'A' LENGTH (INCHES)	24.3	25.8	27.3	24.4	25.9	27.4
LOWER BOLT 'B' LENGTH (INCHES)	22.7	24.2	25.7	22.7	24.2	25.8

NOTE: BOLT CALCULATIONS ASSUME A 17" POLE TOP DIAMETER

ISDD9FFA3 PLATES

ISDD9FFA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
1	ADCVF 001	6	VOID FILLER COMPOUND FOR DEADEND ASSEMBLY
24	CLATG 001	3	CLAMP, TRANSFORMER TANK GROUND, BRONZE, #6 SOL - #1 STR
31	CNNCP 016	6	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	27 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
72	TEEDE 003	12	TEE, DUCTILE IRON, H.D.G., 6" HOLE SPACING, STRENGTH = 60,000#

ISDD9FFA3*556S

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 053	2	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 054	8	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 055	2	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
26	CLEHL 004	6	SOCKET-Y CLEVIS, CLASS 52-3/5, L = 11", PIN = 7/8", H.D.G.
42	DEACB 003	6	DEADEND COMPRESSION ASSEMBLY FOR 556 ACSR, OVAL EYE
50	INSSU008	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-3/5
58	LUGGR 002	6	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	12	SQUARE LOCK NUT FOR 7/8 INCH BOLT, HOT DIPPED GALVANIZED
76	WASRD 006	24	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISDD9FFA3*954S

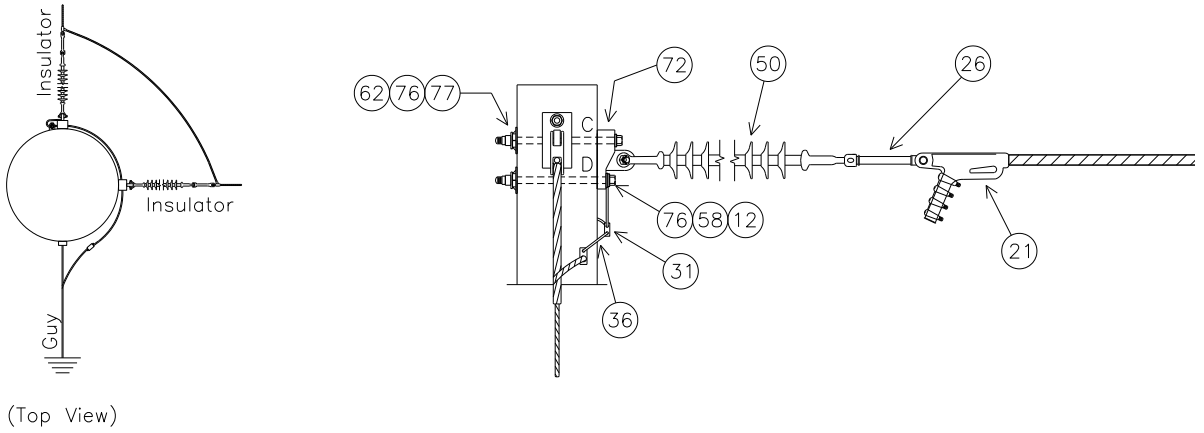
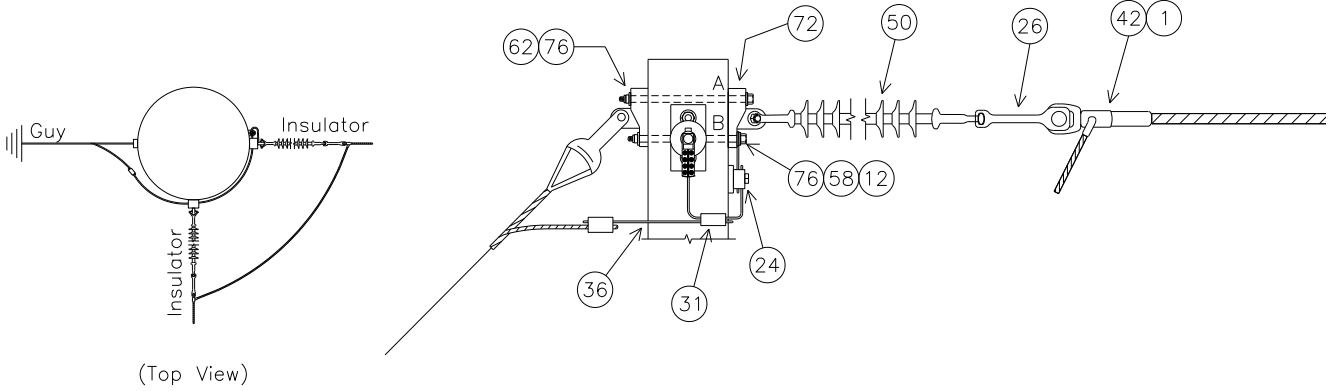
NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 053	2	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 054	8	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 055	2	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
26	CLEHL 005	6	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8", H.D.G.
42	DEACB 005	6	DEADEND COMPRESSION ASSEMBLY FOR 954 ACSR, OVAL EYE
50	INSDE 004	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
58	LUGGR 002	6	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	12	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
76	WASRD 006	24	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISDD9FFA3*1590

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 063	2	MACHINE BOLT, 1" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 064	8	MACHINE BOLT, 1" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 070	2	MACHINE BOLT, 1" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
26	CLEHL 005	6	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8", H.D.G.
42	DEACB 007	6	DEADEND COMPRESSION ASSEMBLY FOR 1590 ACSR, OVAL EYE
50	INSDE 004	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
58	LUGGR 003	6	LUG FOR 1" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 006	12	SQUARE LOCK NUT FOR 1" BOLT, H.D.G.
76	WASRD 007	24	ROUND WASHER FOR 1" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISDD9FSA1

INSULATOR FOR SPUN CONCRETE POLES
DOUBLE DEAD-END 90, FULL TENSION TO SLACK TENSION, 69KV, 1-PHASE
 CONDUCTOR OPTIONS: 954S, 1590



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

FULL TENSION SIDE

SUBSTRUCTURE	Top
UPPER BOLT 'A' LENGTH (INCHES)	22.8
LOWER BOLT 'B' LENGTH (INCHES)	21.2

SLACK TENSION SIDE

SUBSTRUCTURE	Top
UPPER BOLT 'A' LENGTH (INCHES)	21.4
LOWER BOLT 'B' LENGTH (INCHES)	20.8

NOTE: BOLT CALCULATIONS ASSUME A 17" POLE TOP DIAMETER

ISDD9FSA1

ISDD9FSA1 BASE

NO.	ITEM ID	QTY	DESCRIPTION
1	ADCVF 001	1	VOID FILLER COMPOUND FOR DEADEND ASSEMBLY
12	BOLMS 052	2	MACHINE BOLT, 7/8" X 22", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
24	CLATG 001	1	CLAMP, TRANSFORMER TANK GROUND, BRONZE, #6 SOL - #1 STR
26	CLEHL 005	1	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8", H.D.G.
26	CLEHL 008	1	SOCKET-EYE CLEVIS, CLASS 52-8/11, L = 10", EYE = 3/4" THICK WITH 13/16" OPENING, H. D. G.
31	CNNCP 016	1	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	6 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
50	INSDE 004	2	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
58	LUGGR 002	1	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	2	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
72	TEEDE 003	3	TEE, DUCTILE IRON, H.D.G., 6" HOLE SPACING, STRENGTH = 60,000#
76	WASRD 006	4	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 002	2	SQUARE CURVED WASHER FOR 7/8" BOLTS, GALVANIZED, 4" X 4"

ISDD9FSA1*954S

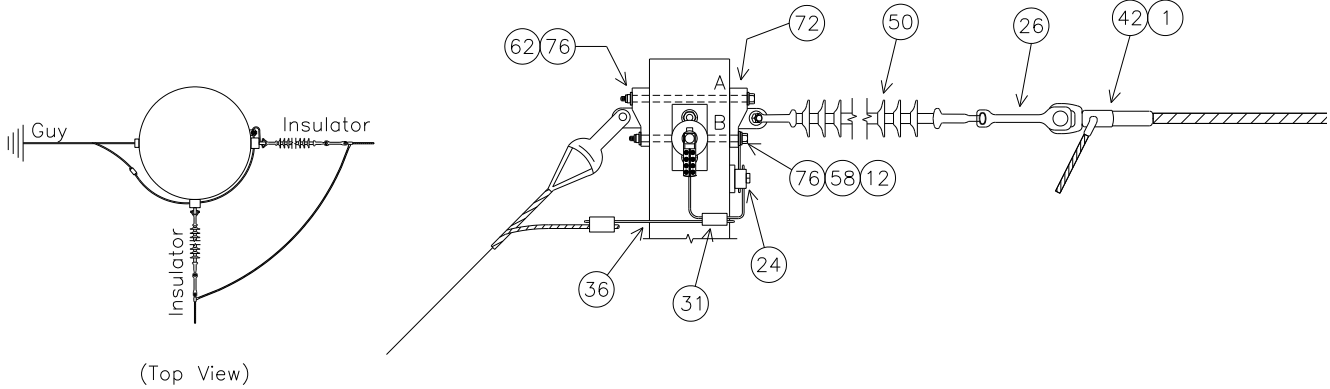
NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 052	1	MACHINE BOLT, 7/8" X 22", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 053	1	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
21	CLAQD 005	1	DEADEND CLAMP (.7 - 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"
42	DEACB 005	1	DEADEND COMPRESSION ASSEMBLY FOR 954 ACSR, OVAL EYE
58	LUGGR 002	1	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	2	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
76	WASRD 006	4	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISDD9FSA1*1590

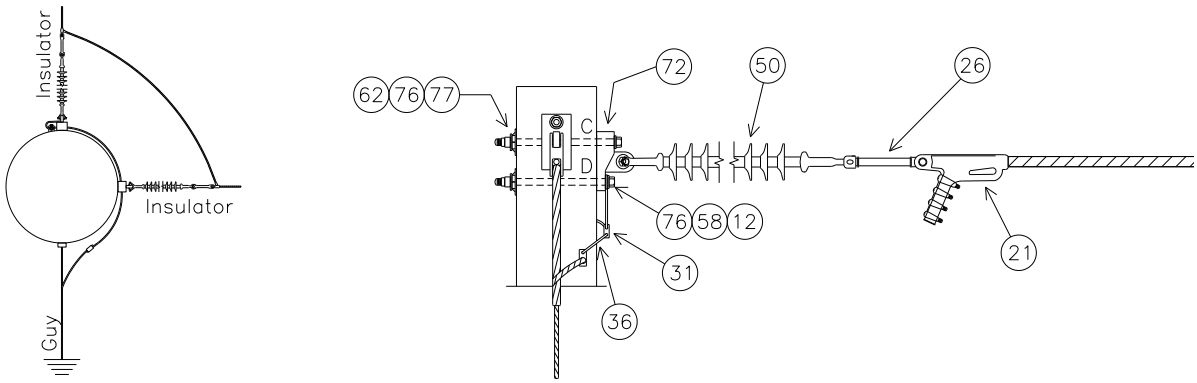
NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 062	1	MACHINE BOLT, 1" X 22", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 063	1	MACHINE BOLT, 1" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
21	CLAQD 006	1	DEADEND CLAMP (1.18 - 1.52") 35,000# STRENGTH, GAP = 2", PIN = 3/4"
42	DEACB 007	1	DEADEND COMPRESSION ASSEMBLY FOR 1590 ACSR, OVAL EYE
58	LUGGR 003	1	LUG FOR 1" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 006	2	SQUARE LOCK NUT FOR 1" BOLT, H.D.G.
76	WASRD 007	4	ROUND WASHER FOR 1" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISDD9FSA3

INSULATOR FOR SPUN CONCRETE POLES
DOUBLE DEAD-END 90, FULL TENSION TO SLACK TENSION, 69KV, 3-PHASE
CONDUCTOR OPTIONS: 954S, 1590



(Top View)



(Top View)

NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

FULL TENSION SIDES

SUBSTRUCTURE	Top	Mid	Bottom
UPPER BOLT (A) LENGTH (INCHES)	24.3	25.8	27.3
LOWER BOLT (B) LENGTH (INCHES)	22.7	24.2	25.7

SLACK TENSION SIDES

SUBSTRUCTURE	Top	Mid	Bottom
UPPER BOLT (A) LENGTH (INCHES)	23.0	24.6	26.1
LOWER BOLT (B) LENGTH (INCHES)	22.3	23.8	25.3

NOTE: BOLT CALCULATIONS ASSUME A 17" POLE TOP DIAMETER

ISDD9FSA3 PLATES

ISDD9FSA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
1	ADCVF 001	3	VOID FILLER COMPOUND FOR DEADEND ASSEMBLY
12	BOLMS 053	3	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 054	2	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 055	1	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
24	CLATG 001	3	CLAMP, TRANSFORMER TANK GROUND, BRONZE, #6 SOL - #1 STR
26	CLEHL 005	3	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8", H.D.G.
26	CLEHL 008	3	SOCKET-EYE CLEVIS, CLASS 52-8/11, L = 10", EYE = 3/4" THICK WITH 13/16" OPENING, H. D. G.
31	CNNCP 016	3	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	18 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
50	INSDE 004	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
72	TEEDE 003	9	TEE, DUCTILE IRON, H.D.G., 6" HOLE SPACING, STRENGTH = 60,000#
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 002	6	SQUARE CURVED WASHER FOR 7/8" BOLTS, GALVANIZED, 4" X 4"

ISDD9FSA3*954S

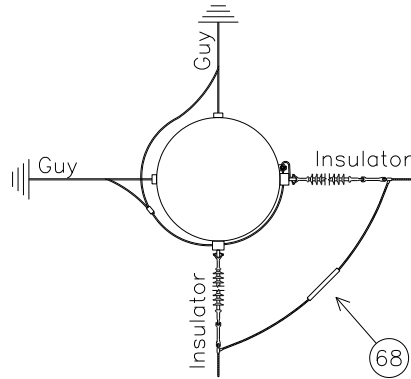
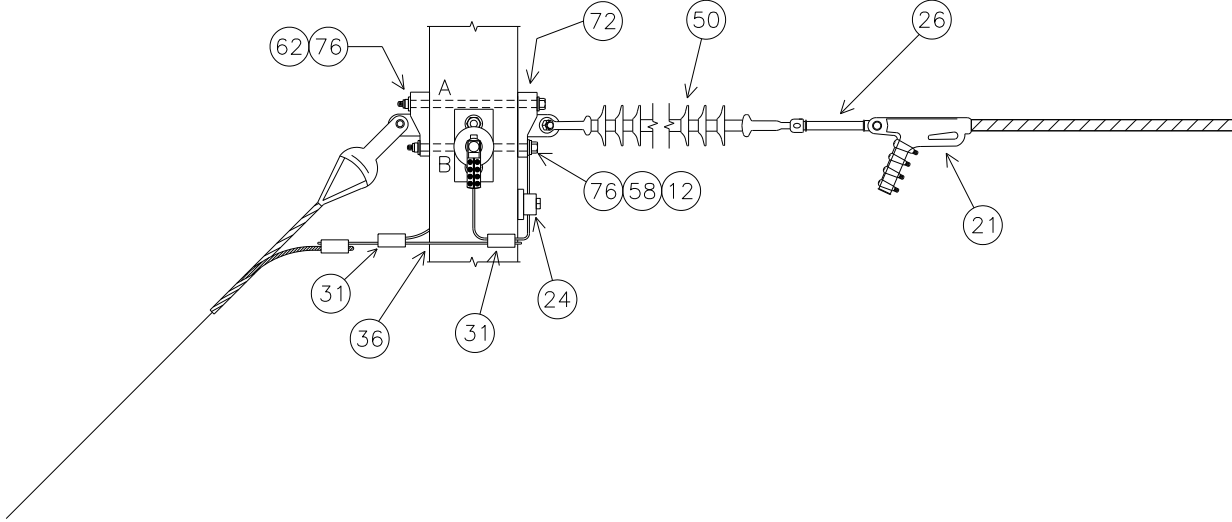
NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 053	1	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 054	4	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 055	1	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
21	CLAQD 005	3	DEADEND CLAMP (.7 - 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"
42	DEACB 005	3	DEADEND COMPRESSION ASSEMBLY FOR 954 ACSR, OVAL EYE
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISDD9FSA3*1590

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 063	1	MACHINE BOLT, 1" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 064	4	MACHINE BOLT, 1" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 070	1	MACHINE BOLT, 1" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
21	CLAQD 006	3	DEADEND CLAMP (1.18 - 1.52") 35,000# STRENGTH, GAP = 2", PIN = 3/4"
42	DEACB 007	3	DEADEND COMPRESSION ASSEMBLY FOR 1590 ACSR, OVAL EYE
58	LUGGR 003	3	LUG FOR 1" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 006	6	SQUARE LOCK NUT FOR 1" BOLT, H.D.G.
76	WASRD 007	12	ROUND WASHER FOR 1" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISDD9SSA3

INSULATOR FOR SPUN CONCRETE POLES
DOUBLE DEAD-END 90, SLACK TENSION TO SLACK TENSION, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 556S, 954A, 954S, 1590



(Top View)

NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	UPPER TEE			LOWER TEE		
	Top	Mid	Bottom	Top	Mid	Bottom
UPPER BOLT 'A' LENGTH (INCHES)	24.2	25.7	27.2	24.3	25.8	27.3
LOWER BOLT 'B' LENGTH (INCHES)	22.6	24.1	25.6	22.7	24.2	25.7

NOTE: BOLT CALCULATIONS ASSUME A 17" POLE TOP DIAMETER

ISDD9SSA3 PLATES

ISDD9SSA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 053	2	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 054	8	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 055	2	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
24	CLATG 001	3	CLAMP, TRANSFORMER TANK GROUND, BRONZE, #6 SOL - #1 STR
26	CLEHL 008	6	SOCKET-EYE CLEVIS, CLASS 52-8/11, L = 10", EYE = 3/4" THICK WITH 13/16" OPENING, H. D. G.
31	CNNCP 016	6	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	18 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
50	INSDE 004	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
58	LUGGR 002	6	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	12	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
72	TEEDE 003	12	TEE, DUCTILE IRON, H.D.G., 6" HOLE SPACING, STRENGTH = 60,000#
76	WASRD 006	24	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISDD9SSA3*556S

NO.	ITEM ID	QTY	DESCRIPTION
21	CLAQD 005	6	DEADEND CLAMP (.7 - 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"
68	SLEAJ 003	3	ALUM. SLEEVE JUMPER FOR 556 ACSR, COMPRESSION SPLICE, NON-TENSION ONLY

ISDD9SSA3*954A

NO.	ITEM ID	QTY	DESCRIPTION
21	CLAQD 005	6	DEADEND CLAMP (.7 - 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"
68	SLEAJ 006	3	ALUM. SLEEVE JUMPER FOR 954 AAC 61, COMPRESSION SPLICE, NON-TENSION ONLY

ISDD9SSA3*954S

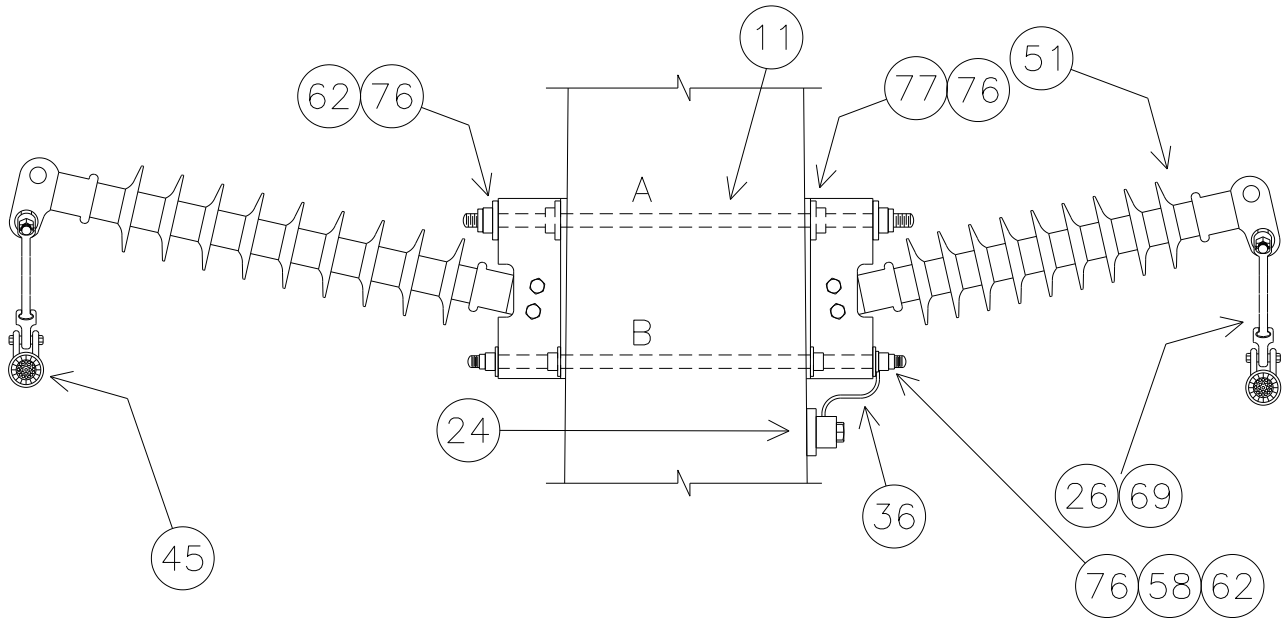
NO.	ITEM ID	QTY	DESCRIPTION
21	CLAQD 005	6	DEADEND CLAMP (.7 - 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"
68	SLEAJ 005	3	ALUM. SLEEVE JUMPER FOR 954 ACSR 54/7, COMPRESSION SPLICE, NON-TENSION ONLY

ISDD9SSA3*1590

NO.	ITEM ID	QTY	DESCRIPTION
21	CLAQD 006	6	DEADEND CLAMP (1.18 - 1.52") 35,000# STRENGTH, GAP = 2", PIN = 3/4"
68	SLEAJ 007	3	ALUM. SLEEVE JUMPER FOR 1590 ACSR 54/19, COMPRESSION SPLICE, NON-TENSION ONLY

ISDPLA3

INSULATOR FOR SPUN CONCRETE POLES
 DOUBLE POST, LONG CLEVIS, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 556S, 954S



NOTE: SEE MBA2 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	Top	Mid	Bottom
BOLT 'A' LENGTH (INCHES)	33.2	34.7	36.2
BOLT 'B' LENGTH (INCHES)	33.7	35.2	36.7

NOTE: BOLT CALCULATIONS ASSUME A 17" POLE TOP DIAMETER.

ISDPLA3 PLATES

ISDPLA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLDA 038	2	DOUBLE ARMING BOLT, 7/8" X 34", WITH 4 SQUARE NUTS ATTACHED
12	BOLDA 039	2	DOUBLE ARMING BOLT, 7/8" X 36", WITH 4 SQUARE NUTS ATTACHED
12	BOLDA 040	2	DOUBLE ARMING BOLT, 7/8" X 38", WITH 4 SQUARE NUTS ATTACHED
24	CLATG 001	3	CLAMP, TRANSFORMER TANK GROUND, BRONZE, #6 SOL - #1 STR
26	CLEHL 001	6	BALL-Y CLEVIS, CLASS 52-3/5, STRENGTH = 30,000#, L ≈ 10", PIN = 3/4", H.D.G.
36	COBCO 028	6 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
51	INSHP 020	6	HORIZONTAL POST INSULATOR, 69KV, L = 45", GAIN BASE, 12° RISE
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	12	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
76	WASRD 006	24	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 002	12	SQUARE CURVED WASHER FOR 7/8" BOLTS, GALVANIZED, 4" X 4" SIZE

ISDPLA3*556S

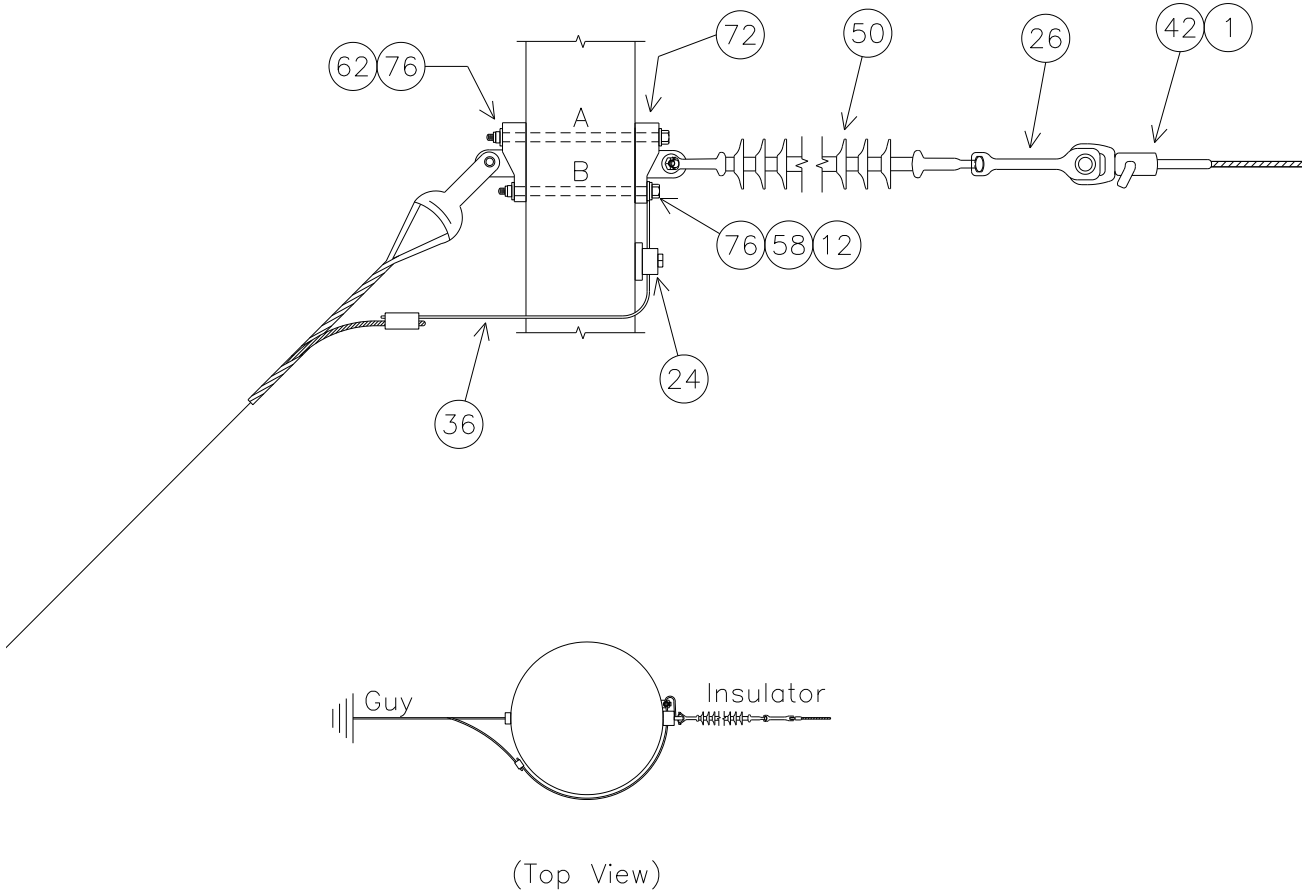
45	GRISA 001	6	ARMOR GRIP SUSPENSION ASSEMBLY FOR 556 ASCR
69	SOCEY 004	6	SOCKET - EYE, STENGTH = 20,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV. T=3/4"

ISDPLA3*954S

45	GRISA 004	6	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 ACSR, 82", 1 3/16" GAP, 5/8" PIN
69	SOCEY 003	6	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV. T=1 1/16"

ISSDFA3

INSULATOR FOR SPUN CONCRETE POLES
SINGLE DEAD-END, FULL TENSION, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 556S, 954S, 1590



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	Top	Mid	Bottom
UPPER BOLT 'A' LENGTH (INCHES)	24.3	25.8	27.3
LOWER BOLT 'B' LENGTH (INCHES)	22.7	24.2	25.7

NOTE: BOLT CALCULATIONS ASSUME A 17" POLE TOP DIAMETER

ISSDFA3 PLATES

ISSDFA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
1	ADCVF 001	3	VOID FILLER COMPOUND FOR DEADEND ASSEMBLY
24	CLATG 001	3	CLAMP, TRANSFORMER TANK GROUND, BRONZE, #6 SOL - #1 STR
36	COBCO 028	12 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
72	TEEDE 003	6	TEE, DUCTILE IRON, H.D.G., 6" HOLE SPACING, STRENGTH = 60,000#

ISSDFA3*556S

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 053	1	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 054	4	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 055	1	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
26	CLEHL 004	3	SOCKET-Y CLEVIS, CLASS 52-3/5, L = 11", PIN = 7/8", H.D.G.
42	DEACB 003	3	DEADEND COMPRESSION ASSEMBLY FOR 556 ACSR, OVAL EYE
50	INSSU 008	3	SUSPENSION SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-3/5
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISSDFA3*954S

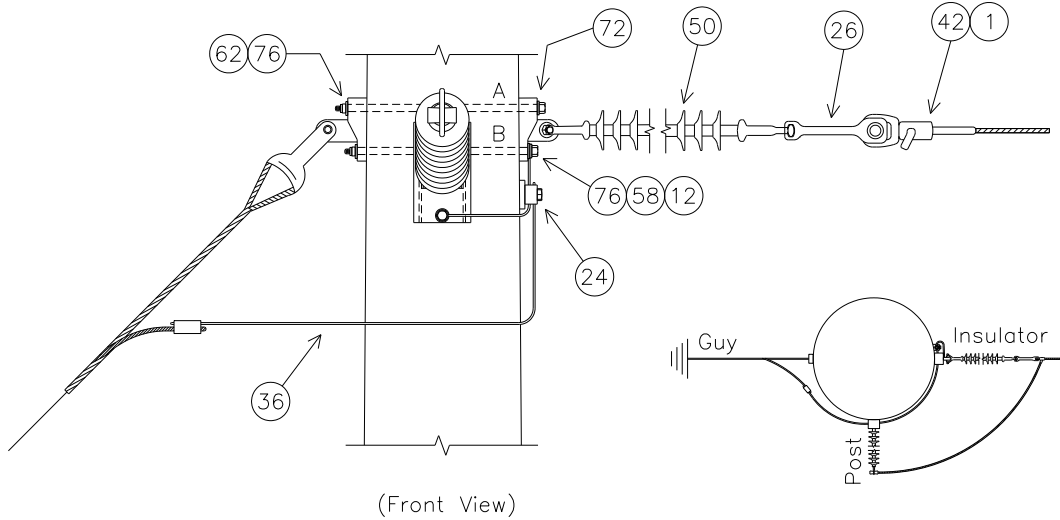
NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 053	1	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 054	4	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 055	1	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
26	CLEHL 005	3	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8", H.D.G.
42	DEACB 005	3	DEADEND COMPRESSION ASSEMBLY FOR 954 ACSR, OVAL EYE
50	INSDE 004	3	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISSDFA3*1590

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 063	1	MACHINE BOLT, 1" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 064	4	MACHINE BOLT, 1" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 070	1	MACHINE BOLT, 1" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
26	CLEHL 005	3	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8", H.D.G.
42	DEACB 007	3	DEADEND COMPRESSION ASSEMBLY FOR 1590 ACSR, OVAL EYE
50	INSDE 004	3	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
58	LUGGR 003	3	LUG FOR 1" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 006	6	SQUARE LOCK NUT FOR 1" BOLT, H.D.G.
76	WASRD 007	12	ROUND WASHER FOR 1" BOLT, 2 1/2" DIAMETER, GALVANIZED

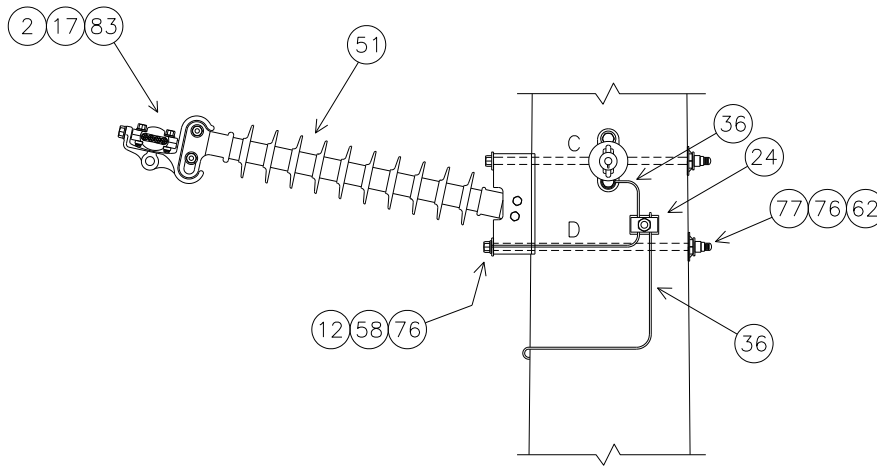
ISSDFP1A3

INSULATOR FOR SPUN CONCRETE POLES
 SINGLE DEAD-END FULL TENSION TO POST, TYPE1, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 556S, 954S, 1590



(Front View)

(Top View)



(Side View)

NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	Top	Mid	Bottom
BOLT 'A' LENGTH (INCHES)	24.3	25.8	27.3
BOLT 'B' LENGTH (INCHES)	22.7	24.2	25.7
BOLT 'C' LENGTH (INCHES)	27.0	28.5	30.1
BOLT 'D' LENGTH (INCHES)	27.5	29.0	30.5

NOTE: BOLT CALCULATIONS ASSUME A 17" POLE TOP DIAMETER

ISSDFP1A3 PLATES

ISSDFP1A3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
1	ADCVF 001	3	VOID FILLER COMPOUND FOR DEADEND ASSEMBLY
2	ADPCT 001	3	CLAMP-TOP ADAPTER, CONVERTS TWO HOLE BLADE TO CLAMP TOP POST
12	BOLMS 055	2	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 073	2	MACHINE BOLT, 7/8" X 30", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 074	2	MACHINE BOLT, 7/8" X 32", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
24	CLATG 001	3	CLAMP, TRANSFORMER TANK GROUND, BRONZE, #6 SOL - #1 STR
36	COBCO 028	12 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
51	INSHP 020	3	HORIZONTAL POST INSULATOR, 69KV, L = 45", GAIN BASE, 12° RISE
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
72	TEEDE 003	6	TEE, DUCTILE IRON, H.D.G., 6" HOLE SPACING, STRENGTH = 60,000#
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 002	6	SQUARE CURVED WASHER FOR 7/8" BOLTS, RIBBED MALLEABLE IRON-GALVANIZED, 4" X 4"

ISSDFP1A3*556S

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 053	1	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 054	4	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 055	1	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
17	CLACT 004	3	CLAMP, ALUMINUM, FOR 556ASCR
26	CLEHL 004	3	SOCKET-Y CLEVIS, CLASS 52-3/5, L = 11", PIN = 7/8", H.D.G.
42	DEACB 003	3	DEADEND COMPRESSION ASSEMBLY FOR 556 ACSR, OVAL EYE
50	INSSU 008	3	SUSPENSION SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-3/5
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
83	RODAR 005	3	ARMOR ROD FOR 556 ACSR, 80"

ISSDFP1A3*954S

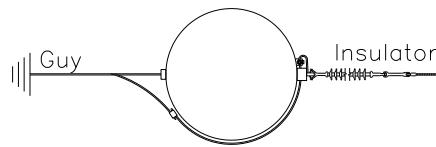
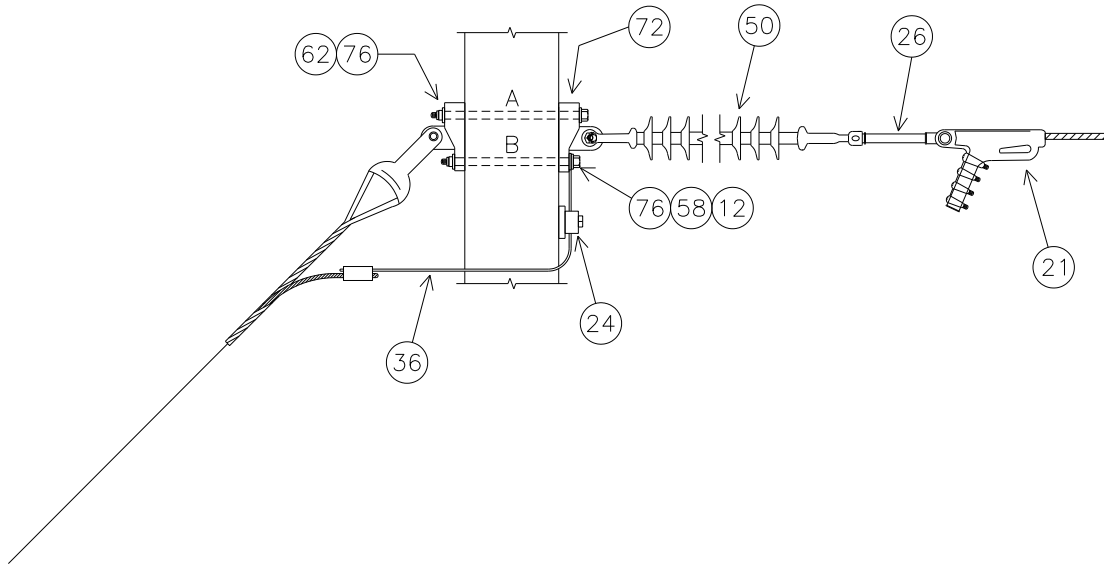
NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 053	1	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 054	4	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 055	1	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
17	CLACT 005	3	CLAMP, ALUMINUM, FOR 954ASCR
26	CLEHL 005	3	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8", H.D.G.
42	DEACB 005	3	DEADEND COMPRESSION ASSEMBLY FOR 954 ACSR, OVAL EYE
50	INSDE 004	3	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
83	RODAR 007	3	ARMOR ROD FOR 954 ACSR, 100"

ISSDFP1A3*1590

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 063	1	MACHINE BOLT, 1" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 064	4	MACHINE BOLT, 1" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 070	1	MACHINE BOLT, 1" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
17	CLACT 006	3	CLAMP, ALUMINUM, FOR 1590ASCR
26	CLEHL 005	3	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8", H.D.G.
42	DEACB 007	3	DEADEND COMPRESSION ASSEMBLY FOR 1590 ACSR, OVAL EYE
50	INSDE 004	3	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
58	LUGGR 003	3	LUG FOR 1" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 006	6	SQUARE LOCK NUT FOR 1" BOLT, H.D.G.
76	WASRD 007	12	ROUND WASHER FOR 1" BOLT, 2 1/2" DIAMETER, GALVANIZED
83	RODAR 008	3	ARMOR ROD FOR 1590 ACSR, 100"

ISSDSA3

INSULATOR FOR SPUN CONCRETE POLES
SINGLE DEAD-END, SLACK TENSION, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 556S, 954A, 954S, 1590



(Top View)

NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	Top	Mid	Bottom
UPPER BOLT 'A' LENGTH (INCHES)	24.2	25.7	27.2
LOWER BOLT 'B' LENGTH (INCHES)	22.6	24.1	25.6

NOTE: BOLT CALCULATIONS ASSUME A 17" POLE TOP DIAMETER

ISSDSA3 PLATES

ISSDSA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 053	1	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 054	4	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 055	1	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
24	CLATG 001	3	CLAMP, TRANSFORMER TANK GROUND, BRONZE, #6 SOL - #1 STR
26	CLEHL 008	3	SOCKET-EYE CLEVIS, CLASS 52-8/11, L = 10", EYE = 3/4" THICK WITH 13/16" OPENING, H. D. G.
36	COBCO 028	12 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
50	INSDE 004	3	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
72	TEEDE 003	6	TEE, DUCTILE IRON, H.D.G., 6" HOLE SPACING, STRENGTH = 60,000#
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISSDSA3*556S, 954A, 954S

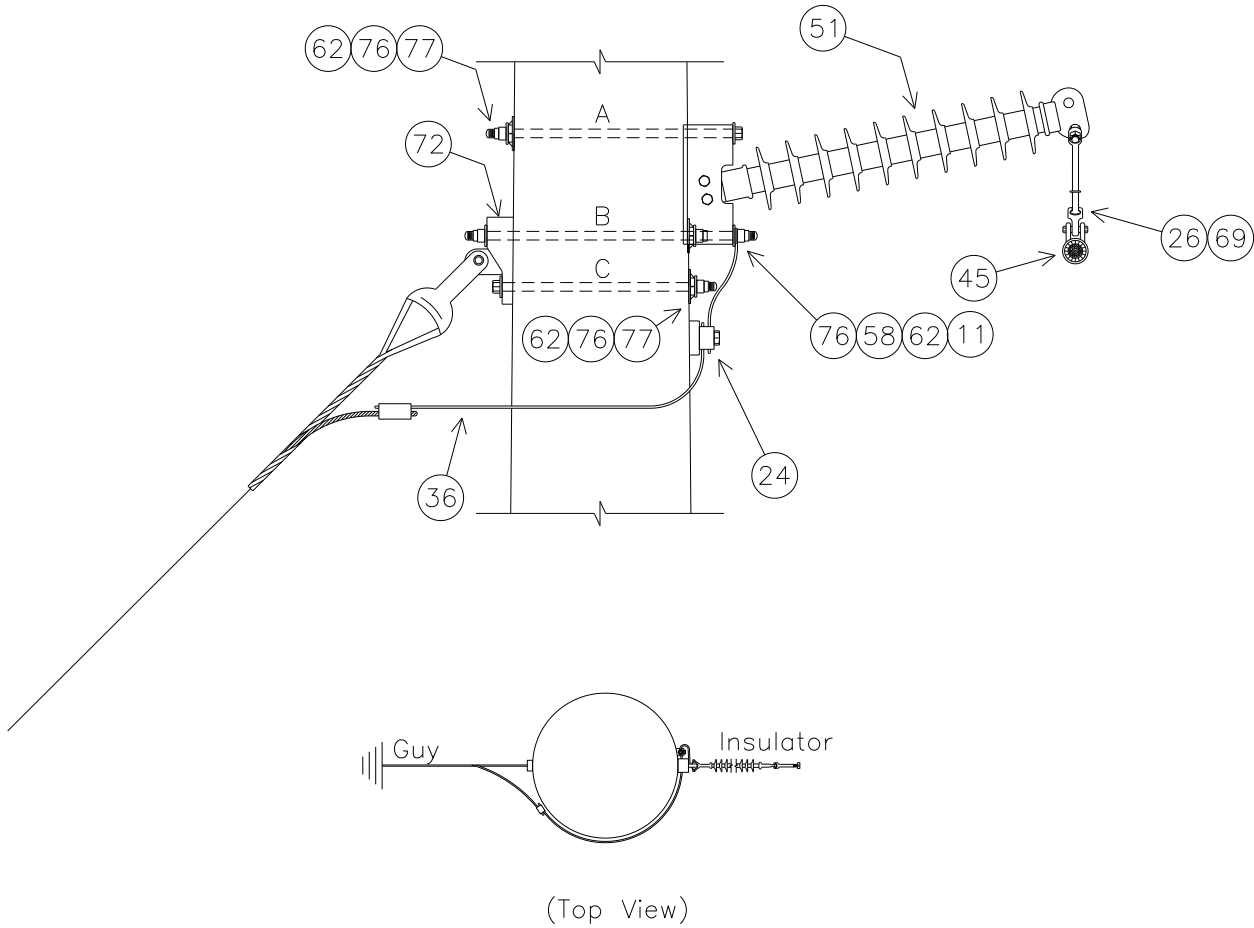
NO.	ITEM ID	QTY	DESCRIPTION
21	CLAQD 005	3	DEADEND CLAMP (.7 - 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"

ISSDSA3*1590

NO.	ITEM ID	QTY	DESCRIPTION
21	CLAQD 006	3	DEADEND CLAMP (1.18 - 1.52") 35,000# STRENGTH, GAP = 2", PIN = 3/4"

ISSPBGA3

INSULATOR FOR SPUN CONCRETE POLES
 SINGLE POST, BOTTOM GUYED, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 954A, 954S



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	Top	Mid	Bottom
BOLT 'A' LENGTH (INCHES)	26.5	28.1	29.6
DA BOLT 'B' LENGTH (INCHES)	28.3	29.9	31.4
BOLT 'C' LENGTH (INCHES)	21.8	23.3	24.8

NOTE: BOLT CALCULATIONS ASSUME A 17" POLE TOP DIAMETER

ISSPBGA3 PLATES

ISSPBGA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
11	BOLDA 036	1	DOUBLE ARMING BOLT, 7/8" X 30", WITH 4 SQUARE NUTS ATTACHED
11	BOLDA 037	2	DOUBLE ARMING BOLT, 7/8" X 32", WITH 4 SQUARE NUTS ATTACHED
12	BOLMS 052	1	MACHINE BOLT, 7/8" X 22", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 053	1	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 054	1	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 055	1	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 073	2	MACHINE BOLT, 7/8" X 30", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
24	CLATG 001	3	CLAMP, TRANSFORMER TANK GROUND, BRONZE, #6 SOL - #1 STR
26	CLEHL 001	3	BALL-Y CLEVIS, CLASS 52-3/5, STRENGTH = 30,000#, L > 9", PIN = 3/4", H.D.G.
36	COBCO 028	9 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
51	INSHP 020	3	HORIZONTAL POST INSULATOR, 69KV, L = 45", GAIN BASE, 12° RISE
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	12	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
72	TEEDE 003	3	TEE, DUCTILE IRON, H.D.G., 6" HOLE SPACING, STRENGTH = 60,000#
76	WASRD 006	21	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 002	9	SQUARE CURVED WASHER FOR 7/8" BOLTS, RIBBED MALLEABLE IRON-GALVANIZED, 4" X 4"

ISSPBGA3*954A

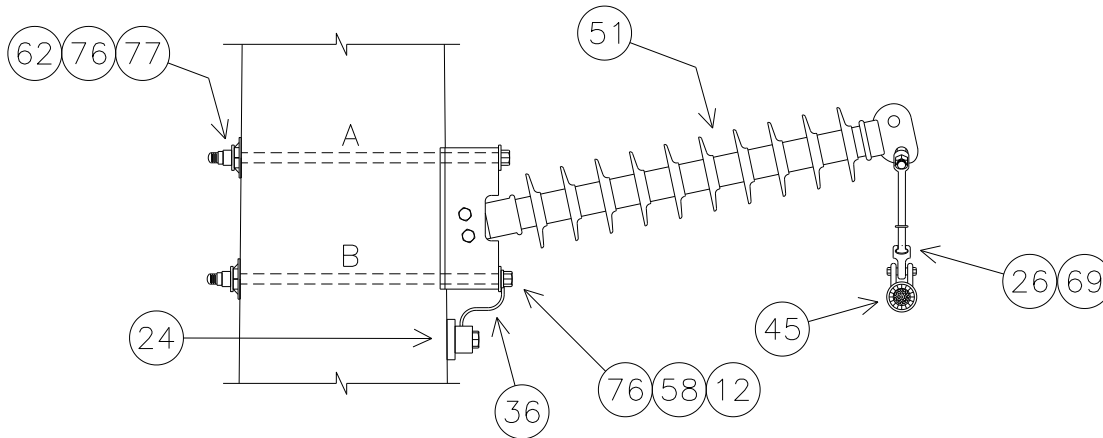
45	GRISA 003	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 AAC, 82", 1 3/16" GAP, 5/8" PIN
69	SOCEY 003	3	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV.

ISSPBGA3*954S

45	GRISA 004	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 ACSR, 82", 1 3/16" GAP, 5/8" PIN
69	SOCEY 003	3	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV.

ISSPNLA3

INSULATOR FOR SPUN CONCRETE POLES
SINGLE POST, NO GUY, LONG CLEVIS, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 954A, 954S



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	Top	Mid	Bottom
BOLT 'A' LENGTH (INCHES)	26.5	28.1	29.6
BOLT 'B' LENGTH (INCHES)	27.0	28.5	30.0

NOTE: BOLT CALCULATIONS ASSUME A 17" POLE TOP DIAMETER.

ISSPNLA3 PLATES

ISSPNLA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 055	2	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, W/ SQUARE NUT ATTACHED
12	BOLMS 073	4	MACHINE BOLT, 7/8" X 30", SQUARE HEAD, GALVANIZED, W/ SQUARE NUT ATTACHED
24	CLATG 001	3	CLAMP, TRANSFORMER TANK GROUND, BRONZE, #6 SOL - #1 STR
26	CLEHL 001	3	BALL-Y CLEVIS, CLASS 52-3/5, STRENGTH = 30,000#, L > 9", PIN = 3/4", H.D.G.
36	COBCO 028	6 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
51	INSHP 020	3	HORIZONTAL POST INSULATOR, 69KV, L = 45", GAIN BASE, 12° RISE
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 002	6	SQUARE CURVED WASHER FOR 7/8" BOLTS, RIBBED MALLEABLE IRON-GALVANIZED, 4" X 4"

ISSPNLA3*954A

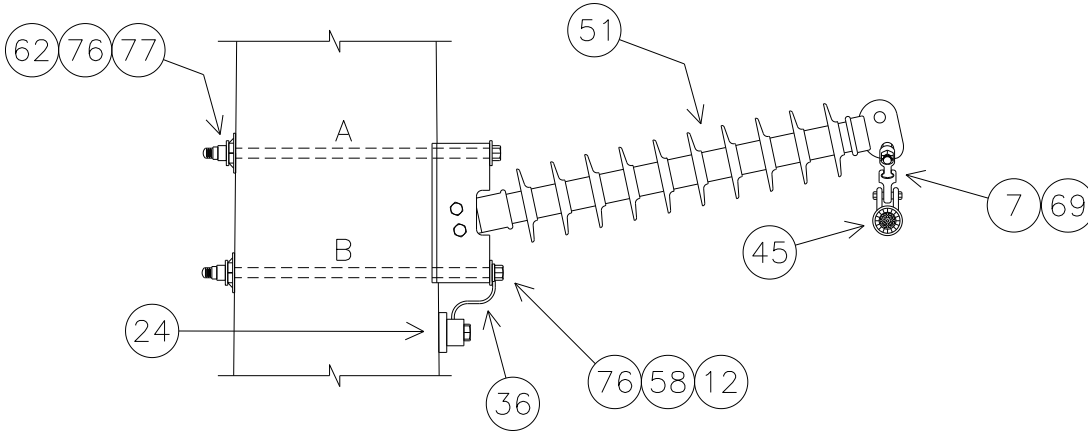
45	GRISA 003	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 AAC, 82", 1 3/16" GAP, 5/8" PIN
69	SOCEY 003	3	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV.

ISSPNLA3*954S

45	GRISA 004	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 ACSR, 82", 1 3/16" GAP, 5/8" PIN
69	SOCEY 003	3	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV.

ISSPNSA3

INSULATOR FOR SPUN CONCRETE POLES
SINGLE POST, NO GUY, SHORT CLEVIS, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 556S, 954A, 954S, 1590



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	Top	Mid	Bottom
BOLT 'A' LENGTH (INCHES)	26.5	27.9	29.4
BOLT 'B' LENGTH (INCHES)	27.0	28.4	29.8

NOTE: BOLT CALCULATIONS ASSUME A 17 INCH POLE TOP DIAMETER.

ISSPNSA3 PLATES

ISSPNSA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
7	BALFI 007	3	BALL-Y CLEVIS, CLASS 52-3/5, STRENGTH = 30,000#, PIN = 3/4", HOT DIPPED GALV.
12	BOLMS 055	2	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 073	4	MACHINE BOLT, 7/8" X 30", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
24	CLATG 001	3	CLAMP, TRANSFORMER TANK GROUND, BRONZE, #6 SOL - #1 STR
36	COBCO 028	6 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
51	INSHP 020	3	HORIZONTAL POST INSULATOR, 69KV, L = 45 INCHES, GAIN BASE, 12 DEGREE RISE
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8 INCH BOLT, HOT DIPPED GALVANIZED
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 002	6	SQUARE CURVED WASHER FOR 7/8" BOLTS, RIBBED MALLEABLE IRON-GALVANIZED, 4" X 4"

ISSPNSA3*556S

45	GRISA 001	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 556 ASCR, 82 INCHES, 1 3/16" GAP, 5/8" PIN
69	SOCEY 004	3	SOCKET - EYE, STENGTH = 20,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV. T= 3/4

ISSPNSA3*954A

45	GRISA 003	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 AAC, 82 INCHES, 1 3/16" GAP, 5/8" PIN
69	SOCEY 003	3	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV. T= 1 1/16

ISSPNSA3*954S

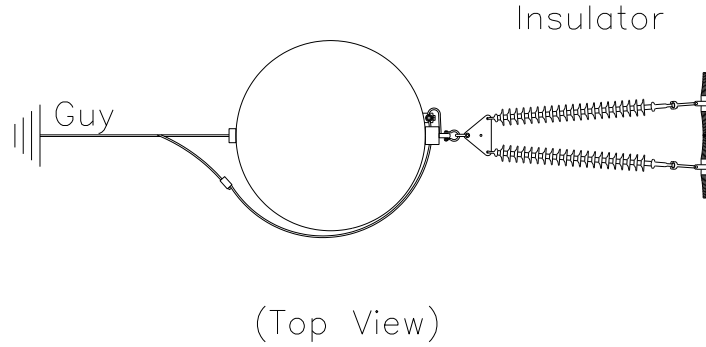
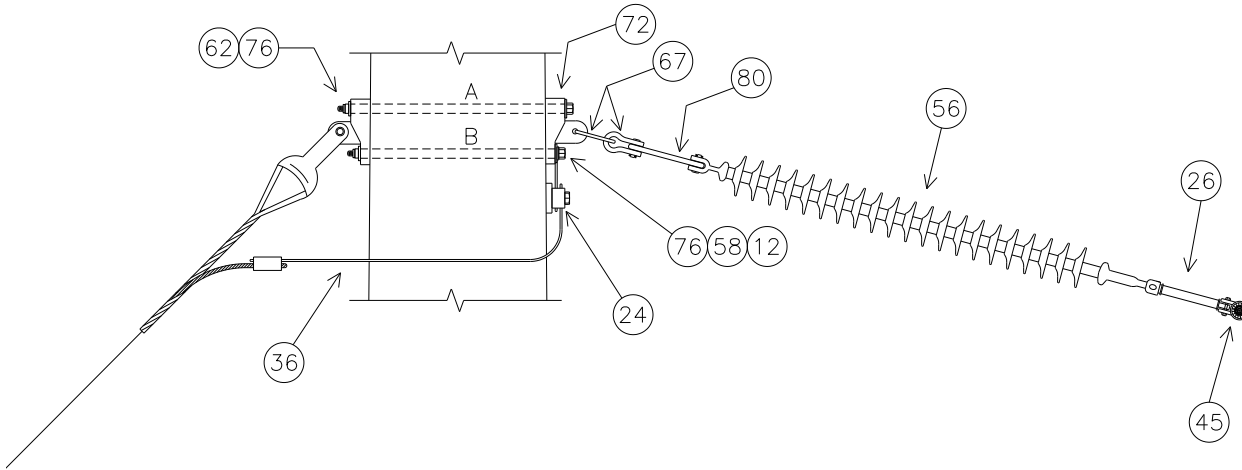
45	GRISA 004	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 ACSR, 82 INCHES, 1 3/16" GAP, 5/8" PIN
69	SOCEY 003	3	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV. T= 1 1/16

ISSPNSA3*1590

45	GRISA 005	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 1590 ASCR, 82 INCHES, 1 3/16" GAP, 5/8" PIN
69	SOCEY 003	3	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV. T= 1 1/16

ISSSDGGA3

**INSULATOR FOR SPUN CONCRETE POLES
 DOUBLE SUSPENSION, DOUBLE GRIP, GUYED, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 954A, 954S, 1590**



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	Top	Mid	Bottom
UPPER BOLT (A) LENGTH (INCHES)	24.3	25.8	27.3
LOWER BOLT (B) LENGTH (INCHES)	22.7	24.2	25.7

NOTE: BOLT CALCULATIONS ASSUME A 17" POLE TOP DIAMETER

ISSSDGGA3 PLATES

ISSSDGGA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
24	CLATG 001	3	CLAMP, TRANSFORMER TANK GROUND, BRONZE, #6 SOL - #1 STR
26	CLEHL 007	6	SOCKET-EYE CLEVIS, CLASS 52-3/5, L = 10", EYE = 3/4" THICK WITH 13/16" OPENING, H. D. G.
36	COBCO 028	9 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
56	INSSU 007	6	SUSPENSION SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 43", CLASS 52-3/5
67	SHAAN 003	6	SHACKLE, 3/4", 50,000#, GALVANIZED
72	TEEDE 003	6	TEE, DUCTILE IRON, H.D.G., 6" HOLE SPACING, STRENGTH = 60,000#
80	YOKPL 003	3	TRIANGULAR SUSPENSION YOKE PLATE, 16" SPACING, GALVANIZED, 15/16 HOLE DIA.

ISSSDGGA3*954A

12	BOLMS 053	1	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 054	4	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 055	1	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
45	GRISA 006	3	DOUBLE AGS UNIT FOR 954A CONDUCTOR
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISSSDGGA3*954S

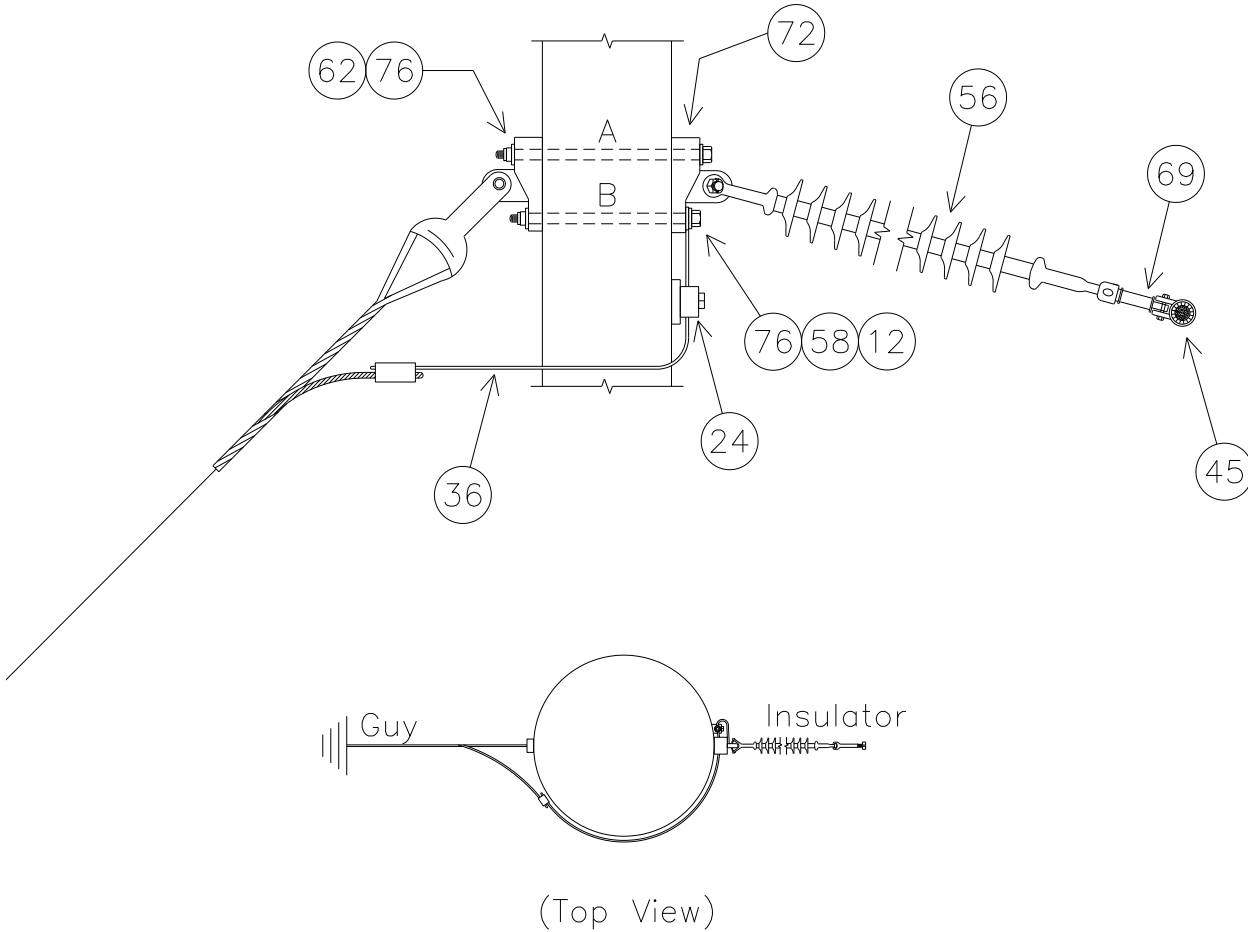
12	BOLMS 053	1	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 054	4	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 055	1	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
45	GRISA 007	3	DOUBLE AGS UNIT FOR 954S CONDUCTOR
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISSSDGGA3*1590

12	BOLMS 063	1	MACHINE BOLT, 1" X 24", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 064	4	MACHINE BOLT, 1" X 26", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 070	1	MACHINE BOLT, 1" X 28", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
45	GRISA 008	3	DOUBLE AGS UNIT FOR 1590 CONDUCTOR
58	LUGGR 003	3	LUG FOR 1" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 006	6	SQUARE LOCK NUT FOR 1" BOLT, H.D.G.
76	WASRD 007	12	ROUND WASHER FOR 1" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISSSSGGA3

INSULATOR FOR SPUN CONCRETE POLES
SINGLE SUSPENSION, SINGLE GRIP, GUYED, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 556S, 954A, 954S, 1590



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	Top	Mid	Bottom
UPPER BOLT 'A' LENGTH (INCHES)	24.2	25.7	27.2
LOWER BOLT 'B' LENGTH (INCHES)	22.6	24.1	25.6

NOTE: BOLT CALCULATIONS ASSUME A 17" POLE TOP DIAMETER

ISSSSGGA3 PLATES

ISSSSGGA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 053	1	MACHINE BOLT, 7/8" X 24", SQUARE HEAD, GALVANIZED, W/ SQUARE NUT ATTACHED
12	BOLMS 054	4	MACHINE BOLT, 7/8" X 26", SQUARE HEAD, GALVANIZED, W/ SQUARE NUT ATTACHED
12	BOLMS 055	1	MACHINE BOLT, 7/8" X 28", SQUARE HEAD, GALVANIZED, W/ SQUARE NUT ATTACHED
24	CLATG 001	3	CLAMP, TRANSFORMER TANK GROUND, BRONZE, #6 SOL - #1 STR
36	COBCO 028	9 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
56	INSSU 007	3	SUSPENSION INSULATOR, SILICONE, Y-BALL COUPLING, 69KV, L = 43", CLASS 52-3/5
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
72	TEEDE 003	6	TEE, DUCTILE IRON, H.D.G., 6" HOLE SPACING, STRENGTH = 60,000#
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED

ISSSSGGA3*556S

45	GRISA 001	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 556 ACSR
69	SOCEY 004	3	SOCKET - EYE, STENGTH = 20,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV.

ISSSSGGA3*954A

45	GRISA 003	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 AAC, 82", 1 3/16" GAP, 5/8" PIN
69	SOCEY 003	3	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV.

ISSSSGGA3*954S

45	GRISA 004	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 ACSR, 82", 1 3/16" GAP, 5/8" PIN
69	SOCEY 003	3	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV.

ISSSSGGA3*1590

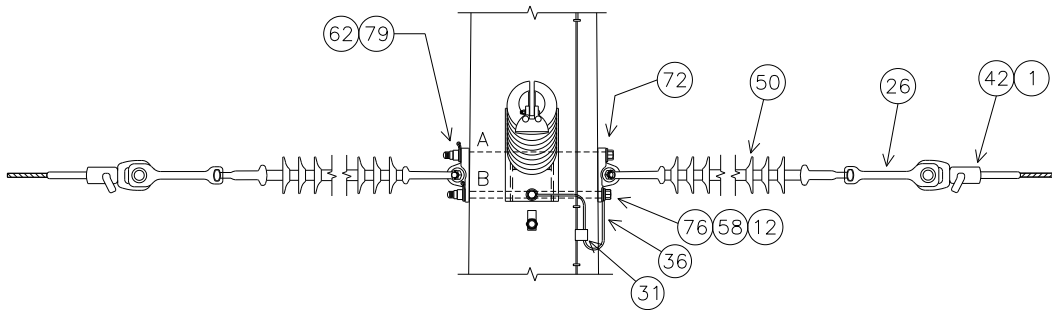
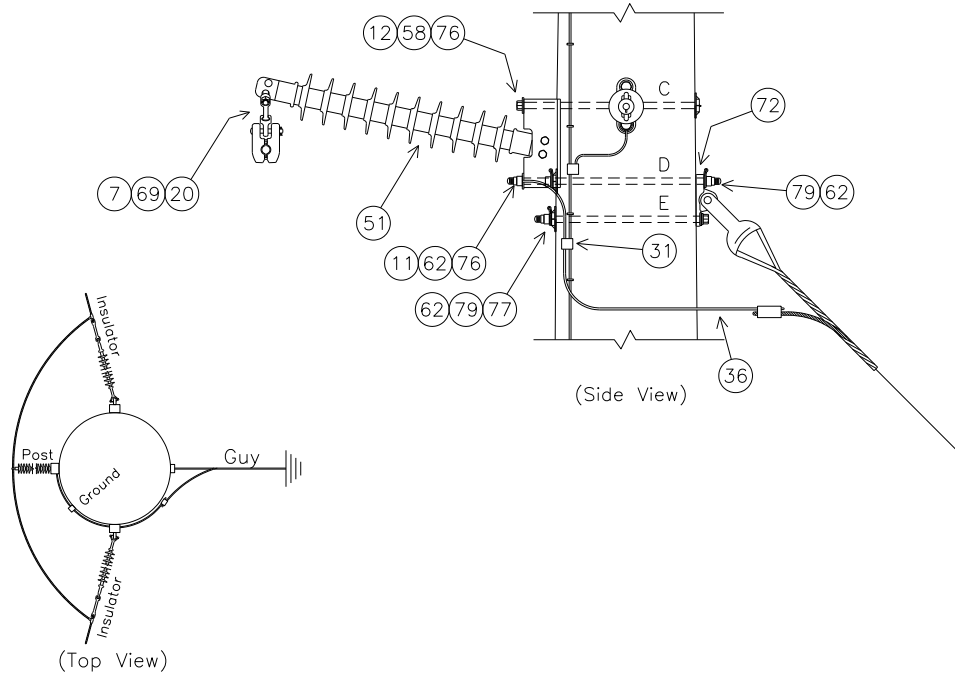
45	GRISA 005	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 1590 ACSR, 88", 1 3/8" GAP, 3/4" PIN
69	SOCEY 003	3	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV.

IWDD3FFA3G

INSULATOR FOR WOOD POLES

DOUBLE DEADEND 135°, FULL TENSION TO FULL TENSION, 69KV, 3-PHASE, GUYED

CONDUCTOR OPTIONS: 556S, 954S



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

DEADEND INSULATOR 7/8"	TOP	MIDDLE	BOTTOM
UPPER BOLT 'A' LENGTH (INCHES)	14.7	15.6	16.5
LOWER BOLT 'B' LENGTH (INCHES)	13.2	14.2	15.1

POST INSULATOR 3/4"	TOP	MIDDLE	BOTTOM
UPPER BOLT 'C' LENGTH (INCHES)	18.1	19.0	20.0
MIDDLE BOLT 'D' LENGTH (INCHES) DA	19.4	20.3	21.3
LOWER BOLT 'E' LENGTH (INCHES)	12.9	13.8	14.8

NOTE: BOLT CALCULATIONS ASSUME A 9 INCH POLE TOP DIAMETER

IWDD3FFA3G PLATES

IWDD3FFA3G BASE

NO.	ITEM ID	QTY	DESCRIPTION
1	ADCVF 001	6	VOID FILLER COMPOUND FOR DEADEND ASSEMBLY
7	BALFI 007	3	BALL Y-CLEVIS, CLASS 52-3/5
11	BOLDA 019	3	DOUBLE ARMING BOLT, 3/4" X 22", WITH 4 SQUARE NUTS ATTACHED
12	BOLMS 036	2	MACHINE BOLT, 3/4" X 14", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 037	1	MACHINE BOLT, 3/4" X 16", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 039	2	MACHINE BOLT, 3/4" X 20", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 040	1	MACHINE BOLT, 3/4" X 22", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 048	1	MACHINE BOLT, 7/8" X 14", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 049	4	MACHINE BOLT, 7/8" X 16", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 050	1	MACHINE BOLT, 7/8" X 18", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
31	CNNCP 016	6	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	18 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
51	INSHP 020	3	HORIZONTAL POST INSULATOR, 69KV, L = 45", GAIN BASE, 12° RISE
58	LUGGR 001	3	LUG FOR 3/4" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
62	NUTSL 004	12	SQUARE LOCK NUT FOR 3/4" BOLT, H.D.G.
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
69	SOCEY 003	3	SOCKET EYE, CLASS 52-3/5
72	TEEDE 002	9	TEE, MALLIABLE IRON, FOR WOOD POLE APPLICATION, H.D.G., 6" HOLE SPACING
76	WASRD 005	9	ROUND WASHER FOR 3/4" BOLT, 2" DIAMETER, GALVANIZED
76	WASRD 006	6	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 001	9	SQUARE CURVED WASHER FOR 3/4" BOLTS, GALVANIZED, 4" X 4" SIZE
79	WASSP 005	12	SPRING WASHER FOR 3/4" BOLT, LEAF TYPE, GALVANIZED
79	WASSP 006	6	SPRING WASHER FOR 7/8" BOLT, LEAF TYPE, GALVANIZED

IWDD3FFA3G*556S

NO.	ITEM ID	QTY	DESCRIPTION
20	CLAJU 005	3	CUSHION GRIP SUSPENSION CLAMP FOR 556 ACSR
26	CLEHL 004	6	SOCKET-Y CLEVIS, CLASS 52-3, L = 11", PIN = 5/8" HOT DIPPED GALV.
42	DEACB 003	6	DEADEND COMPRESSION ASSEMBLY FOR 556 ACSR, OVAL EYE
50	INSSU 008	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-5

IWDD3FFA3G*954S

NO.	ITEM ID	QTY	DESCRIPTION
20	CLAJU 007	3	CUSHION GRIP SUSPENSION CLAMP FOR 954 ACSR
26	CLEHL 005	6	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8" HOT DIPPED GALV.
42	DEACB 005	6	DEADEND COMPRESSION ASSEMBLY FOR 954 ACSR, OVAL EYE
50	INSDI 004	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11

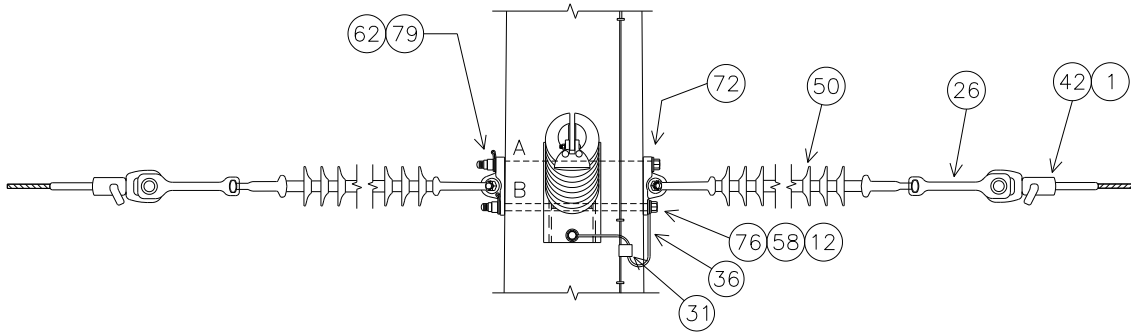
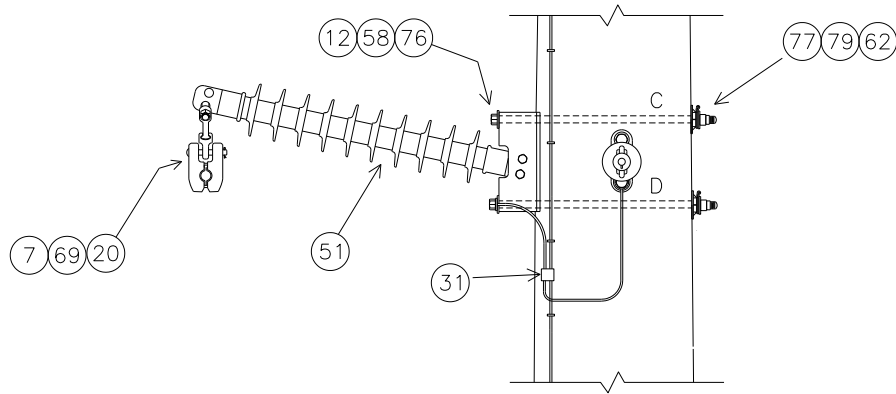
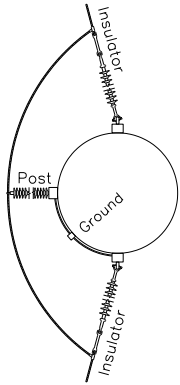
NOTE: USE 3/4" BOLTS FOR POST INSULATORS AND 7/8" BOLTS FOR DEADEND INSULATORS

IWDD3FFA3N

INSULATOR FOR WOOD POLES

DOUBLE DEADEND 135°, FULL TENSION TO FULL TENSION, 69KV, 3-PHASE, NO GUY

CONDUCTOR OPTIONS: 556S, 954S



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

DEADEND INSULATOR	TOP	MIDDLE	BOTTOM
UPPER BOLT 'A' LENGTH (INCHES)	14.7	15.6	16.5
LOWER BOLT 'B' LENGTH (INCHES)	13.2	14.2	15.1

POST INSULATOR	TOP	MIDDLE	BOTTOM
UPPER BOLT 'C' LENGTH (INCHES)	18.1	19.0	20.0
LOWER BOLT 'D' LENGTH (INCHES)	18.5	19.4	20.3

NOTE: BOLT CALCULATIONS ASSUME A 9 INCH POLE TOP DIAMETER

IWDD3FFA3N PLATES

IWDD3FFA3N BASE

NO.	ITEM ID	QTY	DESCRIPTION
1	ADCVF 001	6	VOID FILLER COMPOUND FOR DEADEND ASSEMBLY
7	BALFI 007	3	BALL Y-CLEVIS, CLASS 52-3/5
12	BOLMS 039	4	MACHINE BOLT, 3/4" X 20", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 040	2	MACHINE BOLT, 3/4" X 22", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 048	1	MACHINE BOLT, 7/8" X 14", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 049	4	MACHINE BOLT, 7/8" X 16", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 050	1	MACHINE BOLT, 7/8" X 18", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
31	CNNCP 016	3	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	9 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
51	INSHP 020	3	HORIZONTAL POST INSULATOR, 69KV, L = 45", GAIN BASE, 12° RISE
58	LUGGR 001	3	LUG FOR 3/4" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
62	NUTSL 004	6	SQUARE LOCK NUT FOR 3/4" BOLT, H.D.G.
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
69	SOCEY 003	3	SOCKET EYE, CLASS 52-3/5
72	TEEDE 002	6	TEE, MALLIABLE IRON, FOR WOOD POLE APPLICATION, H.D.G., 6" HOLE SPACING
76	WASRD 005	6	ROUND WASHER FOR 3/4" BOLT, 2" DIAMETER, GALVANIZED
76	WASRD 006	6	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 001	6	SQUARE CURVED WASHER FOR 3/4" BOLTS, GALVANIZED, 4" X 4" SIZE
79	WASSP 005	6	SPRING WASHER FOR 3/4" BOLT, LEAF TYPE, GALVANIZED
79	WASSP 006	6	SPRING WASHER FOR 7/8" BOLT, LEAF TYPE, GALVANIZED

IWDD3FFA3N*556S

NO.	ITEM ID	QTY	DESCRIPTION
20	CLAJU 005	3	CUSHION GRIP SUSPENSION CLAMP FOR 556 ACSR
26	CLEHL 004	6	SOCKET-Y CLEVIS, CLASS 52-3, L = 11", PIN = 5/8" HOT DIPPED GALV.
42	DEACB 003	6	DEADEND COMPRESSION ASSEMBLY FOR 556 ACSR, OVAL EYE
50	INSSU 008	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-5

IWDD3FFA3N*954S

NO.	ITEM ID	QTY	DESCRIPTION
20	CLAJU 007	3	CUSHION GRIP SUSPENSION CLAMP FOR 954 ACSR
26	CLEHL 005	6	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8" HOT DIPPED GALV.
42	DEACB 005	6	DEADEND COMPRESSION ASSEMBLY FOR 954 ACSR, OVAL EYE
50	INSDE 004	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11

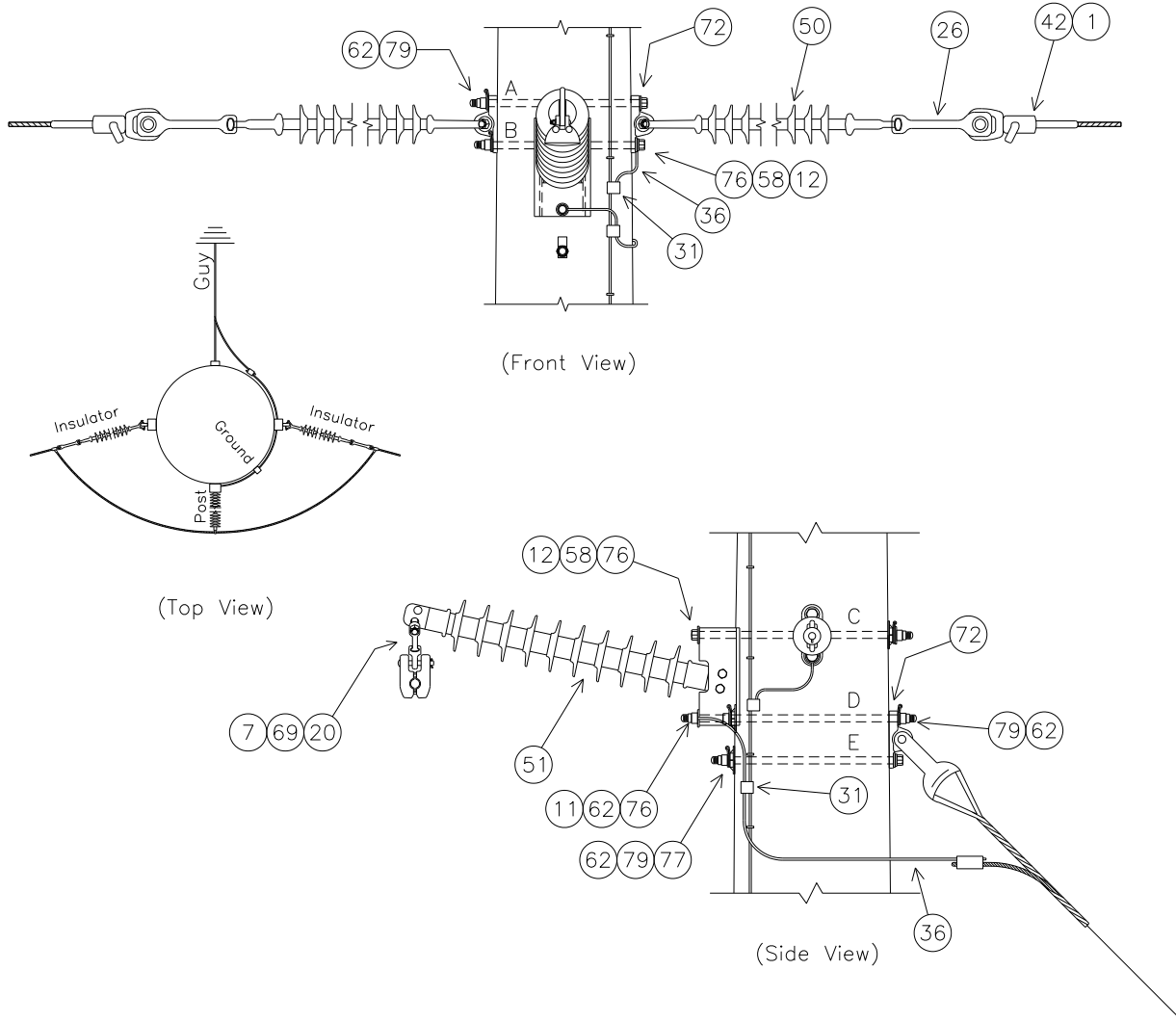
NOTE: USE 3/4" BOLTS FOR POST INSULATORS AND 7/8" BOLTS FOR DEADEND INSULATORS

IWDD5FFA3

INSULATOR FOR WOOD POLES

DOUBLE DEAD-END 150°, FULL TENSION TO FULL TENSION, 69KV, 3-PHASE

CONDUCTOR OPTIONS: 556S, 954S



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

DEADEND INSULATOR 7/8"	TOP	MIDDLE	BOTTOM
UPPER BOLT 'A' LENGTH (INCHES)	14.8	15.6	16.4
LOWER BOLT 'B' LENGTH (INCHES)	13.4	14.2	15.0

POST INSULATOR 3/4"	TOP	MIDDLE	BOTTOM
UPPER BOLT 'C' LENGTH (INCHES)	18.1	18.9	19.7
MIDDLE BOLT 'D' LENGTH (INCHES) DA	19.4	20.2	21.0
LOWER BOLT 'E' LENGTH (INCHES)	12.9	13.7	14.5

NOTE: BOLT CALCULATIONS ASSUME A 9 INCH POLE TOP DIAMETER

IWDD5FFA3 PLATES

IWDD5FFA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
1	ADCVF 001	6	VOID FILLER COMPOUND FOR DEADEND ASSEMBLY
7	BALFI 007	3	BALL Y-CLEVIS, CLASS 52-3/5
11	BOLDA 019	3	DOUBLE ARMING BOLT, 3/4" X 22", WITH 4 SQUARE NUTS ATTACHED
12	BOLMS 036	2	MACHINE BOLT, 3/4" X 14", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 037	1	MACHINE BOLT, 3/4" X 16", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 039	3	MACHINE BOLT, 3/4" X 20", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 048	1	MACHINE BOLT, 7/8" X 14", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 049	4	MACHINE BOLT, 7/8" X 16", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 050	1	MACHINE BOLT, 7/8" X 18", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
31	CNNCP 016	6	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	18 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
51	INSHP 020	3	HORIZONTAL POST INSULATOR, 69KV, L = 45", GAIN BASE, 12° RISE
58	LUGGR 001	3	LUG FOR 3/4" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
62	NUTSL 004	12	SQUARE LOCK NUT FOR 3/4" BOLT, H.D.G.
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
69	SOCEY 003	3	SOCKET EYE, CLASS 52-3/5
72	TEEDE 002	9	TEE, MALLIABLE IRON, FOR WOOD POLE APPLICATION, H.D.G., 6" HOLE SPACING
76	WASRD 005	9	ROUND WASHER FOR 3/4" BOLT, 2" DIAMETER, GALVANIZED
76	WASRD 006	6	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 001	9	SQUARE CURVED WASHER FOR 3/4" BOLTS, GALVANIZED, 4" X 4" SIZE
79	WASSP 005	12	SPRING WASHER FOR 3/4" BOLT, LEAF TYPE, GALVANIZED
79	WASSP 006	6	SPRING WASHER FOR 7/8" BOLT, LEAF TYPE, GALVANIZED

IWDD5FFA3*556S

NO.	ITEM ID	QTY	DESCRIPTION
20	CLAJU 005	3	CUSHION GRIP SUSPENSION CLAMP FOR 556 ACSR
26	CLEHL 004	6	SOCKET-Y CLEVIS, CLASS 52-3, L = 11", PIN = 5/8" HOT DIPPED GALV.
42	DEACB 003	6	DEADEND COMPRESSION ASSEMBLY FOR 556 ACSR, OVAL EYE
50	INSSU 008	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-5

IWDD5FFA3*954S

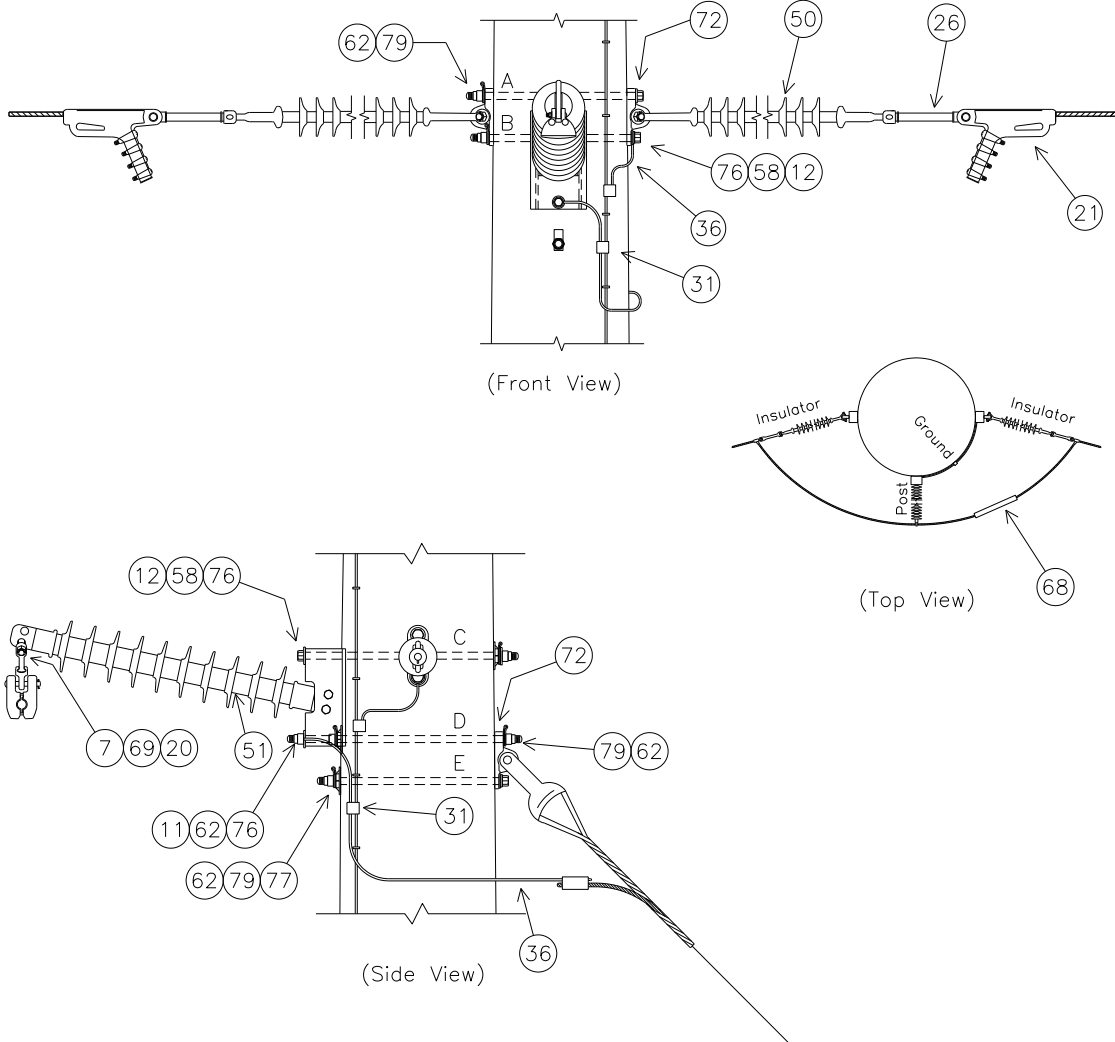
NO.	ITEM ID	QTY	DESCRIPTION
20	CLAJU 007	3	CUSHION GRIP SUSPENSION CLAMP FOR 954 ACSR
26	CLEHL 005	6	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8" HOT DIPPED GALV.
42	DEACB 005	6	DEADEND COMPRESSION ASSEMBLY FOR 954 ACSR, OVAL EYE
50	INSDE 004	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11

IWDD5SSA3

INSULATOR FOR WOOD POLES

DOUBLE DEAD-END 150°, SLACK TENSION TO SLACK TENSION, 69KV, 3-PHASE

CONDUCTOR OPTIONS: 556S, 954S



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

DEADEND INSULATOR 7/8"	TOP	MIDDLE	BOTTOM
UPPER BOLT 'A' LENGTH (INCHES)	14.8	15.6	16.4
LOWER BOLT 'B' LENGTH (INCHES)	13.4	14.2	15.0

POST INSULATOR 3/4"	TOP	MIDDLE	BOTTOM
UPPER BOLT 'C' LENGTH (INCHES)	18.1	18.9	19.7
MIDDLE BOLT 'D' LENGTH (INCHES) DA	19.4	20.2	21.0
LOWER BOLT 'E' LENGTH (INCHES)	12.9	13.7	14.5

NOTE: BOLT CALCULATIONS ASSUME A 9 INCH POLE TOP DIAMETER

IWDD5SSA3 PLATES

IWDD5SSA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
7	BALFI 007	3	BALL Y-CLEVIS, CLASS 52-3/5
11	BOLDA 019	3	DOUBLE ARMING BOLT, 3/4" X 22", WITH 4 SQUARE NUTS ATTACHED
12	BOLMS 036	2	MACHINE BOLT, 3/4" X 14", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 037	1	MACHINE BOLT, 3/4" X 16", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 039	3	MACHINE BOLT, 3/4" X 20", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 048	1	MACHINE BOLT, 7/8" X 14", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 049	4	MACHINE BOLT, 7/8" X 16", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 050	1	MACHINE BOLT, 7/8" X 18", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
26	CLEHL 008	6	SOCKET-EYE CLEVIS, CLASS 52-8/11, L = 10", EYE = 3/4" THICK W/ 13/16 OPENING, H. D. G.
31	CNNCP 016	6	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	18 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
50	INSD 004	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
51	INSHP 020	3	HORIZONTAL POST INSULATOR, 69KV, L = 45", GAIN BASE, 12° RISE
58	LUGGR 001	3	LUG FOR 3/4" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
62	NUTSL 004	12	SQUARE LOCK NUT FOR 3/4" BOLT, H.D.G.
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
69	SOCEY 003	3	SOCKET EYE, CLASS 52-3/5
72	TEEDE 002	9	TEE, MALLIABLE IRON, FOR WOOD POLE APPLICATION, H.D.G., 6" HOLE SPACING
76	WASRD 005	9	ROUND WASHER FOR 3/4" BOLT, 2" DIAMETER, GALVANIZED
76	WASRD 006	6	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 001	9	SQUARE CURVED WASHER FOR 3/4" BOLTS, GALVANIZED, 4" X 4" SIZE
79	WASSP 005	12	SPRING WASHER FOR 3/4" BOLT, LEAF TYPE, GALVANIZED
79	WASSP 006	6	SPRING WASHER FOR 7/8" BOLT, LEAF TYPE, GALVANIZED

IWDD5SSA3*556S

NO.	ITEM ID	QTY	DESCRIPTION
20	CLAJU 005	3	CUSHION GRIP SUSPENSION CLAMP FOR 556 ACSR
21	CLAQD 005	6	DEADEND CLAMP (.7 - 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"
68	SLEAJ 003	3	ALUM. SLEEVE JUMPER FOR 556 ACSR, COMPRESSION SPLICE, NON-TENSION ONLY

IWDD5SSA3*954S

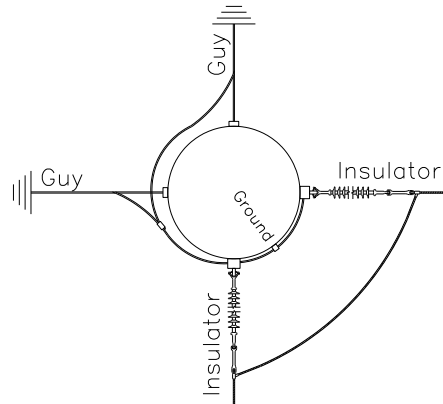
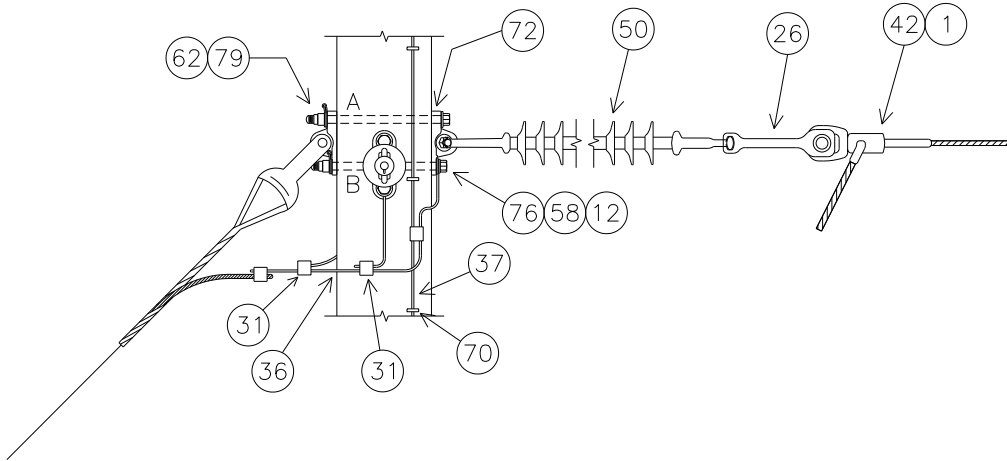
NO.	ITEM ID	QTY	DESCRIPTION
20	CLAJU 007	3	CUSHION GRIP SUSPENSION CLAMP FOR 954 ACSR
21	CLAQD 005	6	DEADEND CLAMP (.7 - 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"
68	SLEAJ 005	3	ALUM. SLEEVE JUMPER FOR 954 ACSR, COMPRESSION SPLICE, NON-TENSION ONLY

IWDD9FFA3

INSULATOR FOR WOOD STRUCTURES

DOUBLE DEAD-END 90°, FULL TENSION TO FULL TENSION, 69KV, 3-PHASE

CONDUCTOR OPTIONS: 556S, 954S



(Top View)

NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	UPPER BRACKET			LOWER BRACKET		
	Top	Mid	Bottom	Top	Mid	Bottom
UPPER BOLT (A) LENGTH (INCHES)	14.6	15.5	16.3	14.7	15.5	16.3
LOWER BOLT (B) LENGTH (INCHES)	13.2	14.0	14.8	13.3	14.1	14.9

NOTE: BOLT CALCULATIONS ASSUME A 9 INCH POLE TOP DIAMETER

IWDD9FFA3 PLATES

IWDD9FFA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
1	ADCVF 001	6	VOID FILLER COMPOUND FOR DEADEND ASSEMBLY
12	BOLMS 048	2	MACHINE BOLT, 7/8" X 14", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 049	8	MACHINE BOLT, 7/8" X 16", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 050	2	MACHINE BOLT, 7/8" X 18", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
31	CNNCP 016	9	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	30 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
58	LUGGR 002	6	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
62	NUTSL 005	12	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
72	TEEDE 002	12	TEE, MALLIABLE IRON, FOR WOOD POLE APPLICATION, H.D.G., 6" HOLE SPACING
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
79	WASSP 006	12	SPRING WASHER FOR 7/8" BOLT, LEAF TYPE, GALVANIZED

IWDD9FFA3*556S

NO.	ITEM ID	QTY	DESCRIPTION
26	CLEHL 005	6	SOCKET-Y CLEVIS, CLASS 52-3/5, L = 11", HOT DIPPED GALV.
42	DEACB 003	6	DEADEND COMPRESSION ASSEMBLY FOR 556 ACSR, OVAL EYE
50	INSSU 008	6	SUSPENSION SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-3/5

IWDD9FFA3*954S

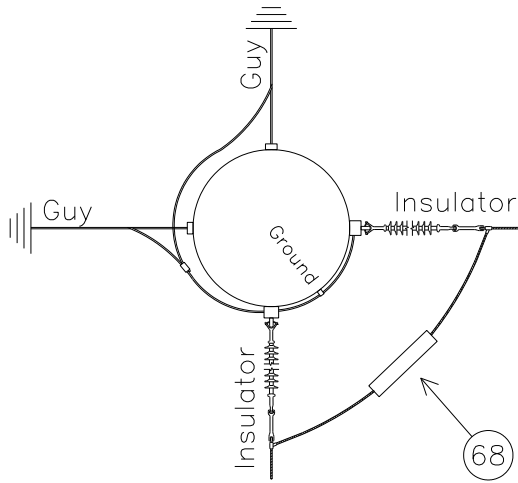
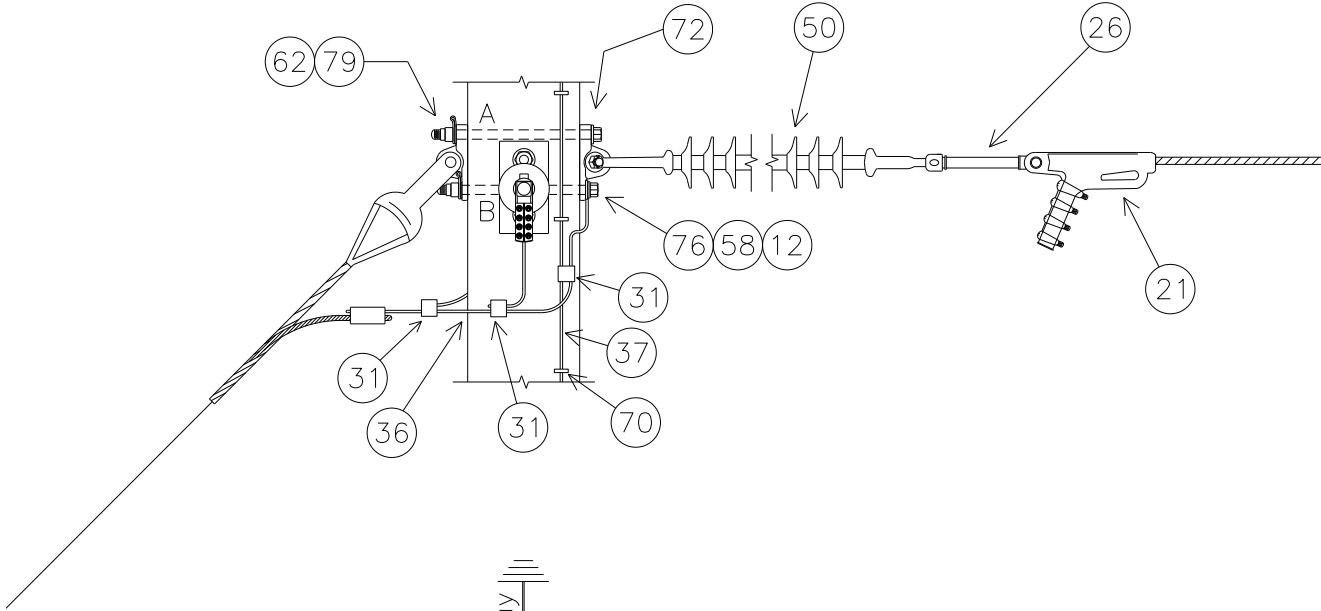
NO.	ITEM ID	QTY	DESCRIPTION
26	CLEHL 005	6	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8" HOT DIPPED GALV.
42	DEACB 005	6	DEADEND COMPRESSION ASSEMBLY FOR 954 ACSR, OVAL EYE
50	INSDE 004	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11

IWDD9SSA3G

INSULATOR FOR WOOD POLES

DOUBLE DEAD-END 90°, SLACK TENSION TO SLACK TENSION, 69KV, 3-PHASE, GUYED

CONDUCTOR OPTIONS: 556S, 954A, 954S



(Top View)

NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	UPPER BRACKET			LOWER BRACKET		
	Top	Mid	Bottom	Top	Mid	Bottom
UPPER BOLT 'A' LENGTH (INCHES)	14.7	15.5	16.3	14.7	15.5	16.3
LOWER BOLT 'B' LENGTH (INCHES)	13.2	14.0	14.8	13.3	14.1	14.9

NOTE: BOLT CALCULATIONS ASSUME A 9 INCH POLE TOP DIAMETER

IWDD9SSA3G PLATES

IWDD9SSA3G BASE

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 048	2	MACHINE BOLT, 7/8" X 14", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 049	8	MACHINE BOLT, 7/8" X 16", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 050	2	MACHINE BOLT, 7/8" X 18", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
26	CLEHL 008	6	SOCKET-EYE CLEVIS, CLASS 52-8/11, L = 10", EYE = 3/4" THICK W/ 13/16 OPENING, H. D. G.
31	CNNCP 016	9	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	30 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
50	INSDE 004	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
58	LUGGR 002	6	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
62	NUTSL 005	12	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
72	TEEDE 002	12	TEE, MALLIABLE IRON, FOR WOOD POLE APPLICATION, H.D.G., 6" HOLE SPACING
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
79	WASSP 006	12	SPRING WASHER FOR 7/8" BOLT, LEAF TYPE, GALVANIZED

IWDD9SSA3G*556S

NO.	ITEM ID	QTY	DESCRIPTION
21	CLAQD 005	6	DEADEND CLAMP (.7 – 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"
68	SLEAJ 003	3	ALUM. SLEEVE JUMPER FOR 556 ACSR, COMPRESSION SPLICE, NON-TENSION ONLY

IWDD9SSA3G*954A

NO.	ITEM ID	QTY	DESCRIPTION
21	CLAQD 005	6	DEADEND CLAMP (.7 – 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"
68	SLEAJ 006	3	ALUM. SLEEVE JUMPER FOR 954 AAC, COMPRESSION SPLICE, NON-TENSION ONLY

IWDD9SSA3G*954S

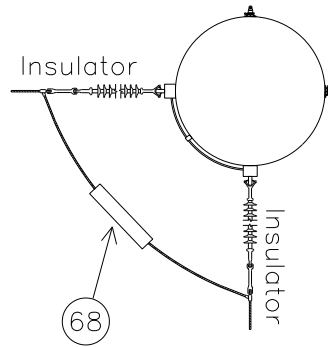
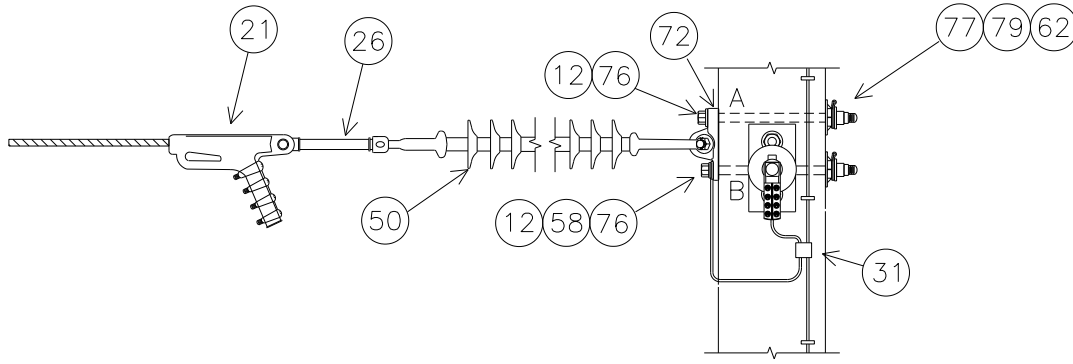
NO.	ITEM ID	QTY	DESCRIPTION
21	CLAQD 005	6	DEADEND CLAMP (.7 – 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"
68	SLEAJ 005	3	ALUM. SLEEVE JUMPER FOR 954 ASCR, COMPRESSION SPLICE, NON-TENSION ONLY

IWDD9SSA3N

INSULATOR FOR WOOD POLES

DOUBLE DEADEND 90°, SLACK TENSION TO SLACK TENSION, 69KV, 3-PHASE, NO GUY

CONDUCTOR OPTIONS: 556S, 954S



(Top View)

NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	UPPER BRACKET			LOWER BRACKET		
	Top	Mid	Bottom	Top	Mid	Bottom
UPPER BOLT 'A' LENGTH (INCHES)	13.8	14.7	15.6	13.8	14.7	15.6
LOWER BOLT 'B' LENGTH (INCHES)	13.2	14.1	15.0	13.2	14.1	15.0

NOTE: BOLT CALCULATIONS ASSUME A 9 INCH POLE TOP DIAMETER

IWDD9SSA3N PLATES

IWDD9SSA3N BASE

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 048	4	MACHINE BOLT, 7/8" X 14", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 049	8	MACHINE BOLT, 7/8" X 16", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
26	CLEHL 008	6	SOCKET-EYE CLEVIS, CLASS 52-8/11, L = 10", EYE = 3/4" THICK W/ 13/16 OPENING, H. D. G.
31	CNNCP 016	3	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	9 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
50	INSDE 004	6	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
58	LUGGR 002	6	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
62	NUTSL 005	12	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
72	TEEDE 002	6	TEE, MALLIABLE IRON, FOR WOOD POLE APPLICATION, H.D.G., 6" HOLE SPACING
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 002	12	SQUARE CURVED WASHER FOR 7/8" BOLTS, GALVANIZED, 4" X 4" SIZE
79	WASSP 006	12	SPRING WASHER FOR 7/8" BOLT, LEAF TYPE, GALVANIZED

IWDD9SSA3N*556S

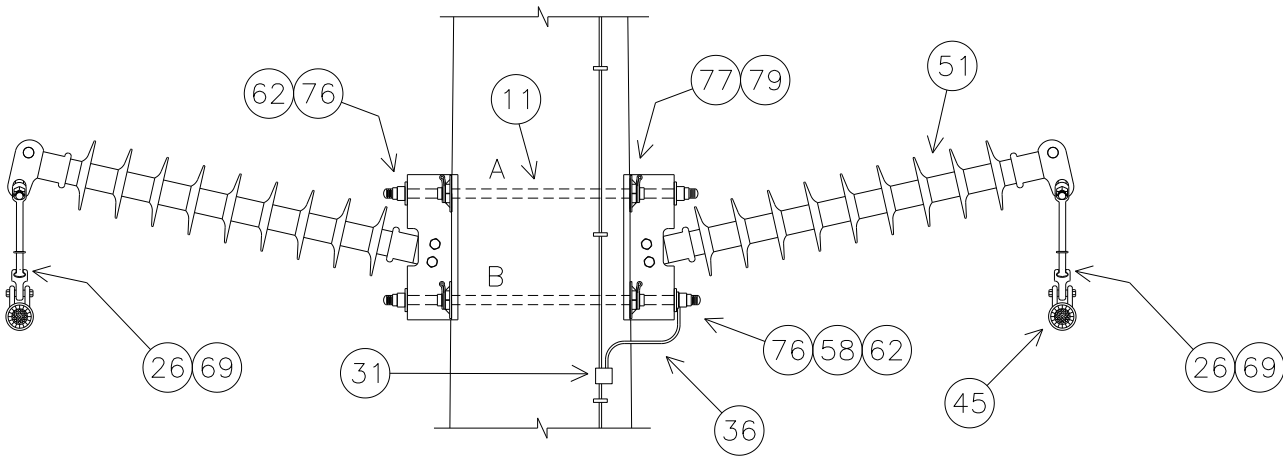
NO.	ITEM ID	QTY	DESCRIPTION
21	CLAQD 005	6	DEADEND CLAMP (.7 – 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"
68	SLEAJ 003	3	ALUM. SLEEVE JUMPER FOR 556 ACSR, COMPRESSION SPLICE, NON-TENSION ONLY

IWDD9SSA3N*954S

NO.	ITEM ID	QTY	DESCRIPTION
21	CLAQD 005	6	DEADEND CLAMP (.7 – 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"
68	SLEAJ 005	3	ALUM. SLEEVE JUMPER FOR 954 ACSR, COMPRESSION SPLICE, NON-TENSION ONLY

IWDPLA2

INSULATOR FOR WOOD POLES
 DOUBLE POST, NO GUY, LONG CLEVIS, 69KV, 2-PHASE
 CONDUCTOR OPTIONS: 556S, 954S



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	Top
BOLT 'A' LENGTH (INCHES)	24.9
BOLT 'B' LENGTH (INCHES)	25.3

NOTE: BOLT CALCULATIONS ASSUME A 9 INCH POLE TOP DIAMETER.

IWDPLA2 PLATES

IWDPLA2 BASE

NO.	ITEM ID	QTY	DESCRIPTION
11	BOLDA 042	2	DOUBLE ARMING BOLT, 7/8" X 26", WITH 4 SQUARE NUTS ATTACHED
26	CLEHL 001	2	BALL-Y CLEVIS, CLASS 52-3/5, STRENGTH = 30,000#, L > 9", PIN = 3/4", HOT DIPPED GALV.
31	CNNCP 016	1	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	3 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
51	INSHP 020	2	HORIZONTAL POST INSULATOR, 69KV, L = 45", GAIN BASE, 12° RISE
58	LUGGR 002	1	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	4	SQUARE LOCK NUT FOR 7/8 INCH BOLT, HOT DIPPED GALVANIZED
76	WASRD 006	4	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 002	4	SQUARE CURVED WASHER FOR 7/8" BOLTS, RIBBED MALLEABLE IRON-GALVANIZED, 4" X 4"
79	WASSP 006	4	SPRING WASHER FOR 7/8" BOLT, LEAF TYPE, GALVANIZED

IWDPLA2*556S

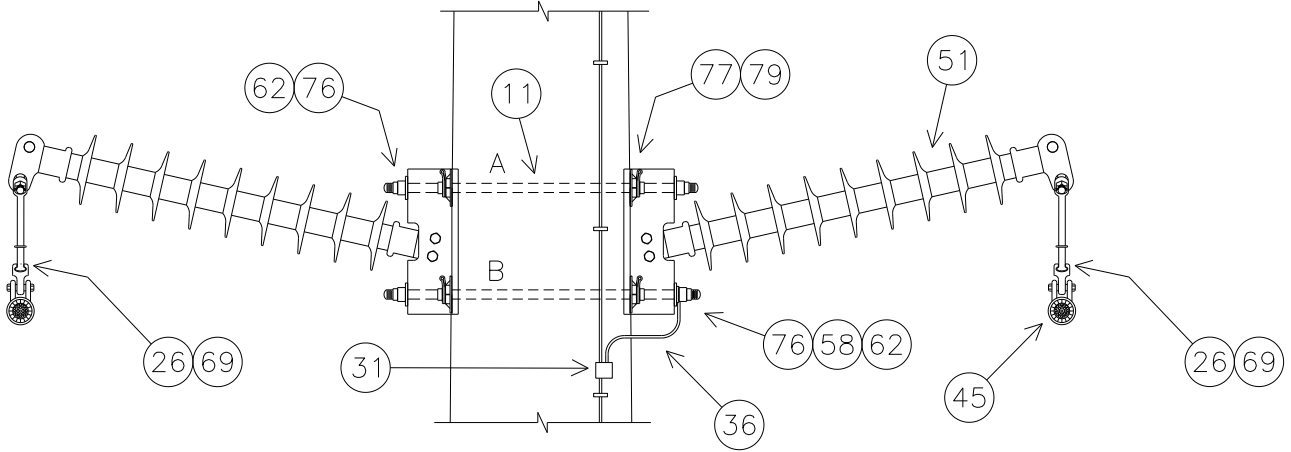
45	GRISA 001	2	ARMOR GRIP SUSPENSION ASSEMBLY FOR 556 ASCR
69	SOCEY 004	2	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV. T=3/4"

IWDPLA2*954S

45	GRISA 004	2	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 ACSR, 82 INCHES, 1 3/16" GAP, 5/8" PIN
69	SOCEY 003	2	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV. T=1 1/16"

IWDPLA3

INSULATOR FOR WOOD POLES
DOUBLE POST, NO GUY, LONG CLEVIS, 69KV, 3-PHASE
CONDUCTOR OPTIONS: 556S, 954S



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	Top	Mid	Bottom
BOLT 'A' LENGTH (INCHES)	24.9	25.7	26.5
BOLT 'B' LENGTH (INCHES)	25.3	26.1	26.9

NOTE: BOLT CALCULATIONS ASSUME A 9 INCH POLE TOP DIAMETER.

IWDPLA3 PLATES

IWDPLA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
11	BOLDA 041	3	DOUBLE ARMING BOLT, 7/8" X 28", WITH 4 SQUARE NUTS ATTACHED
11	BOLDA 042	3	DOUBLE ARMING BOLT, 7/8" X 26", WITH 4 SQUARE NUTS ATTACHED
26	CLEHL 001	6	BALL-Y CLEVIS, CLASS 52-3/5, STRENGTH = 30,000#, L > 9", PIN = 3/4", HOT DIPPED GALV.
31	CNNCP 016	3	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	9 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
51	INSHP 020	6	HORIZONTAL POST INSULATOR, 69KV, L = 45", GAIN BASE, 12° RISE
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	12	SQUARE LOCK NUT FOR 7/8 INCH BOLT, HOT DIPPED GALVANIZED
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 002	12	SQUARE CURVED WASHER FOR 7/8" BOLTS, RIBBED MALLEABLE IRON-GALVANIZED, 4" X 4"
79	WASSP 006	12	SPRING WASHER FOR 7/8" BOLT, LEAF TYPE, GALVANIZED

IWDPLA3*556S

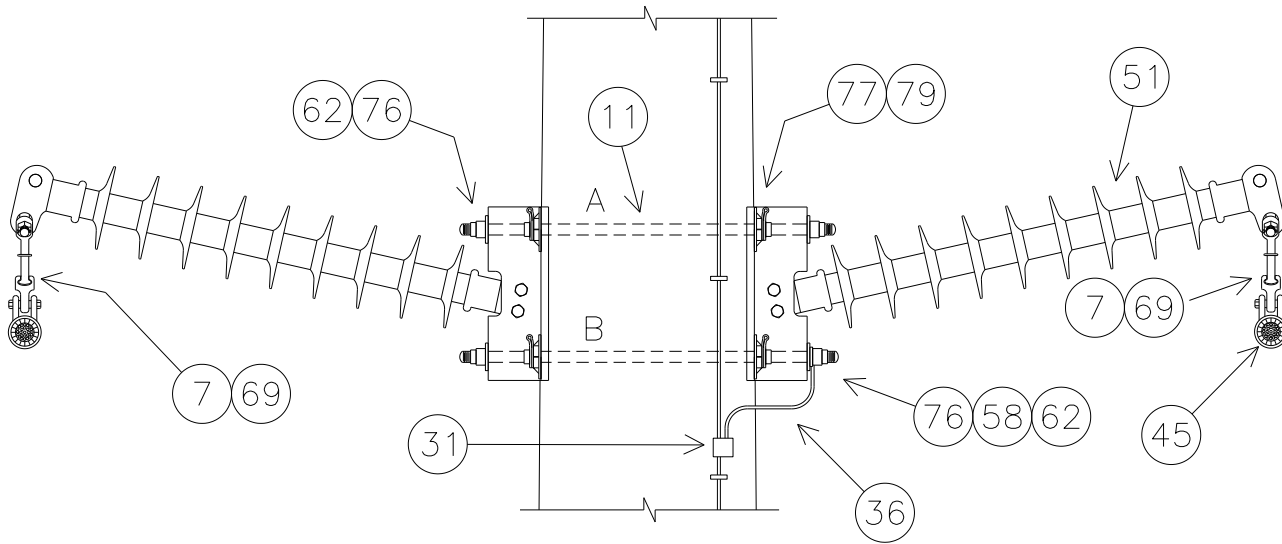
45	GRISA 001	6	ARMOR GRIP SUSPENSION ASSEMBLY FOR 556 ASCR
69	SOCEY 004	6	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV. T=3/4"

IWDPLA3*954S

45	GRISA 004	6	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 ACSR, 82 INCHES, 1 3/16" GAP, 5/8" PIN
69	SOCEY 003	6	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV. T=1 1/16"

IWDPSA3

INSULATOR FOR WOOD POLES
 DOUBLE POST, NO GUY, SHORT CLEVIS, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 556S, 954S



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	Top	Mid	Bottom
BOLT 'A' LENGTH (INCHES)	24.9	25.7	26.5
BOLT 'B' LENGTH (INCHES)	25.3	26.1	26.9

NOTE: BOLT CALCULATIONS ASSUME A 9 INCH POLE TOP DIAMETER.

IWDPSA3 PLATES

IWDPSA3 BASE

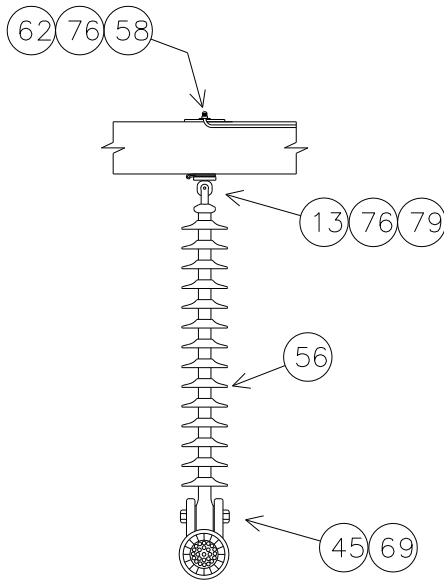
NO.	ITEM ID	QTY	DESCRIPTION
7	BALFI 007	6	BALL-Y CLEVIS, CLASS 52-3/5, STRENGTH = 30,000#, PIN = 3/4", HOT DIPPED GALV.
11	BOLDA 041	3	DOUBLE ARMING BOLT, 7/8" X 28", WITH 4 SQUARE NUTS ATTACHED
11	BOLDA 042	3	DOUBLE ARMING BOLT, 7/8" X 26", WITH 4 SQUARE NUTS ATTACHED
31	CNNCP 016	3	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	9 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
51	INSHP 020	6	HORIZONTAL POST INSULATOR, 69KV, L = 45", GAIN BASE, 12° RISE
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	12	SQUARE LOCK NUT FOR 7/8 INCH BOLT, HOT DIPPED GALVANIZED
76	WASRD 006	12	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 002	12	SQUARE CURVED WASHER FOR 7/8" BOLTS, RIBBED MALLEABLE IRON-GALVANIZED, 4" X 4"
79	WASSP 006	12	SPRING WASHER FOR 7/8" BOLT, LEAF TYPE, GALVANIZED

IWDPSA3*556S

45	GRISA 001	6	ARMOR GRIP SUSPENSION ASSEMBLY FOR 556 ASCR
69	SOCEY 004	6	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV. T=3/4"

IWHS A1

INSULATOR FOR WOOD POLES
 HORIZONTAL SUSPENSION, 69KV, 1-PHASE
 CONDUCTOR OPTIONS: 556S, 954S



IWHS A1 PLATES

IWHS A1 BASE

NO.	ITEM ID	QTY	DESCRIPTION
13	BOLSE 009	1	BOLT, SHOULDER EYE, 3/4" X 10"
31	CNNCP 016	1	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	3 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
56	INSSU 007	1	SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 43", CLASS 52-5
58	LUGGR 001	1	LUG FOR 3/4" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
62	NUTSL 004	1	SQUARE LOCK NUT FOR 3/4" BOLT, H.D.G.
76	WASRD 005	2	ROUND WASHER FOR 3/4" BOLT, 2" DIAMETER, GALVANIZED
79	WASSP 005	1	SPRING WASHER FOR 3/4" BOLT, LEAF TYPE, GALVANIZED

IWHS A1*556S

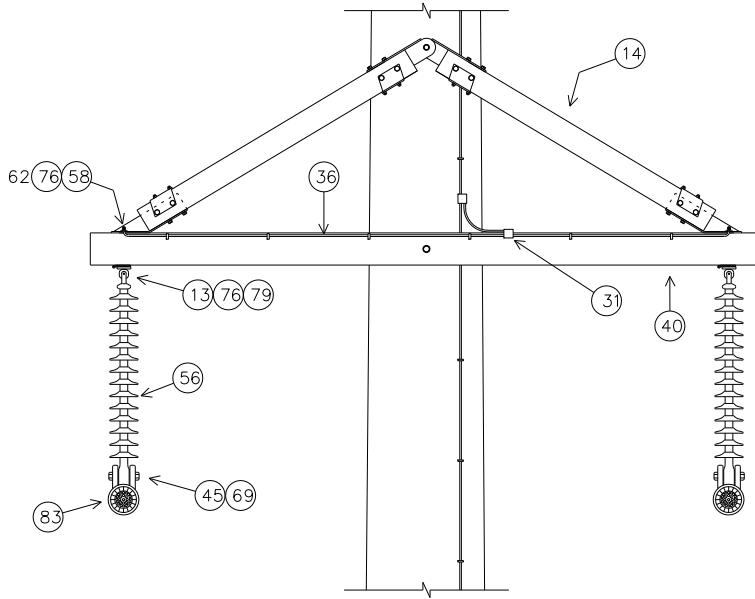
NO.	ITEM ID	QTY	DESCRIPTION
45	GRISA 001	1	ARMOR GRIP SUSPENSION ASSEMBLY FOR 556 ASCR
69	SOCEY 004	1	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV. T=3/4"

IWHS A1*954S

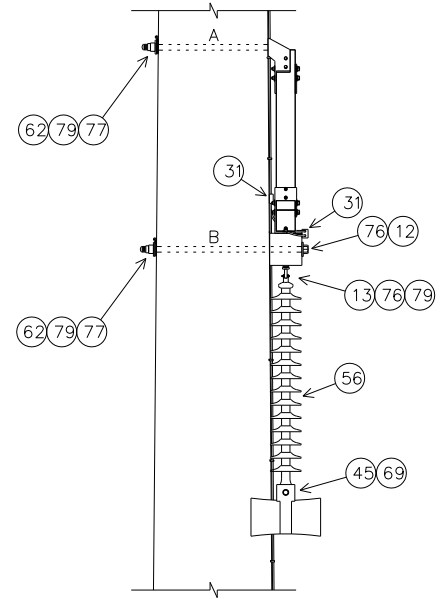
NO.	ITEM ID	QTY	DESCRIPTION
45	GRISA 004	1	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 ASCR
69	SOCEY 003	1	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV. T=3/4"

IWHS A2

INSULATOR FOR WOOD POLES
 HORIZONTAL SUSPENSION, 69KV, 2-PHASE
 CONDUCTOR OPTIONS: 556S, 954S



IN-LINE
FACE



BIRTHMARK
FACE

IWWSA2 PLATES

IWWSA2 BASE

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 039	2	MACHINE BOLT, 3/4" X 20", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
13	BOLSE 009	2	BOLT, SHOULDER EYE, 3/4" X 10"
14	BRCCF 001	1 PR	BRACE, CROSSARM, 3' 6" DROP, 9' SPAN, PENTA TREATED, GALV. END FITTINGS
31	CNNCP 016	2	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	15 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
40	CXAWO 005	1	10' WOOD CROSSARM, TREATED SOUTHERN YELLOW PINE
56	INSSU 007	2	SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 43", CLASS 52-5
58	LUGGR 001	2	LUG FOR 3/4" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
62	NUTSL 004	4	SQUARE LOCK NUT FOR 3/4" BOLT, H.D.G.
76	WASRD 005	6	ROUND WASHER FOR 3/4" BOLT, 2" DIAMETER, GALVANIZED
77	WASSC 001	2	SQUARE CURVED WASHER FOR 3/4" BOLTS, GALVANIZED, 4" X 4" SIZE
79	WASSP 005	4	SPRING WASHER FOR 3/4" BOLT, LEAF TYPE, GALVANIZED

IWWSA2*556S

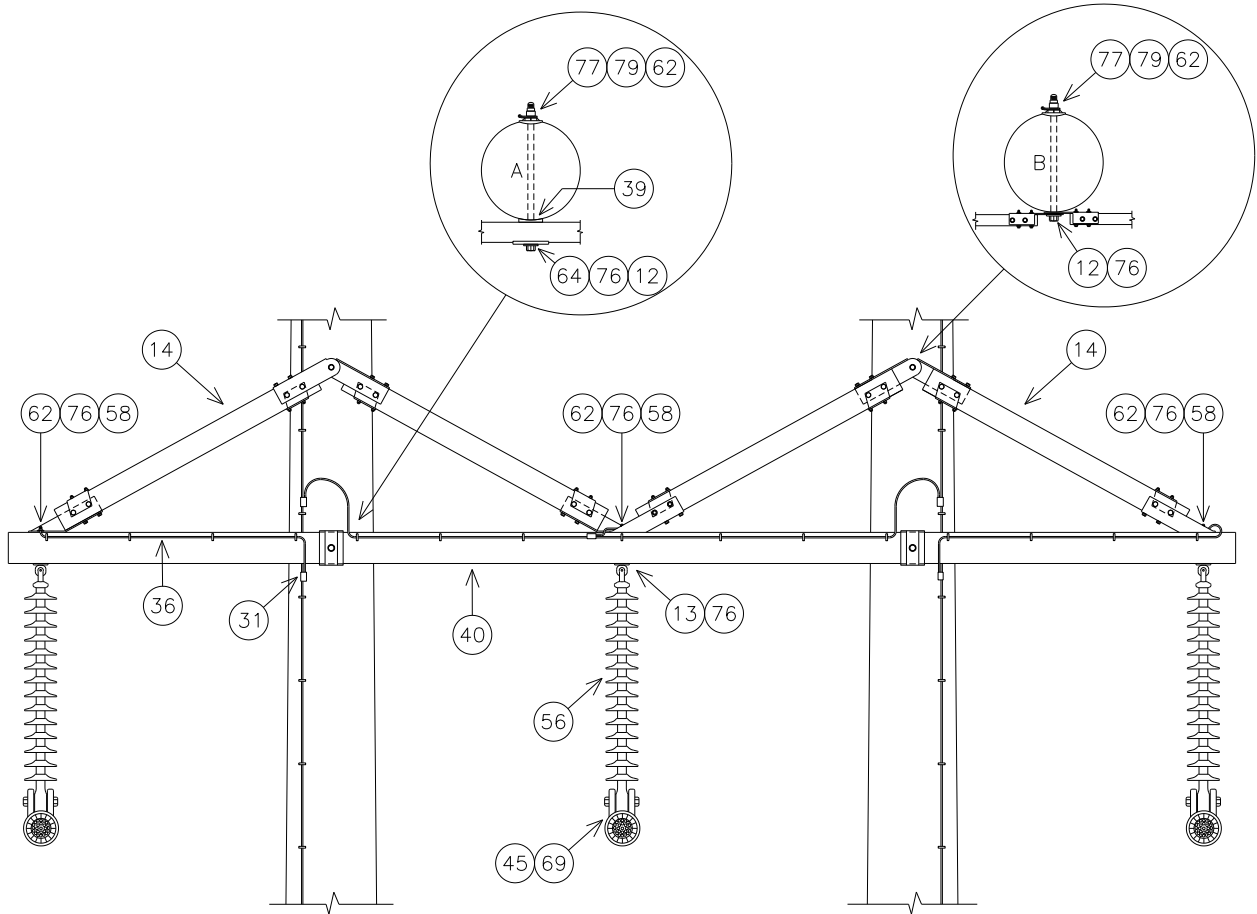
NO.	ITEM ID	QTY	DESCRIPTION
45	GRISA 001	2	ARMOR GRIP SUSPENSION ASSEMBLY FOR 556 ASCR
69	SOCEY 004	2	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV. T=3/4"

IWWSA2*954S

NO.	ITEM ID	QTY	DESCRIPTION
45	GRISA 004	2	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 ASCR
69	SOCEY 003	2	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV. T=3/4"

IWHS A3

INSULATOR FOR WOOD POLES
 HORIZONTAL SUSPENSION, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 556S, 954S



SUBSTRUCTURE	
CROSSARM BOLT LENGTH (INCHES)	18.4
EYE-BOLT LENGTH (INCHES)	9.6
BRACE BOLT LENGTH (INCHES)	12.3

IWWSA3 PLATES

IWWSA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 036	2	MACHINE BOLT, 3/4" X 14", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 039	2	MACHINE BOLT, 3/4" X 20", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
13	BOLSE 009	3	BOLT, SHOULDER EYE, 3/4" X 10"
14	BRCCF 001	2 PR	BRACE, CROSSARM, 3' 6" DROP, 9' SPAN, PENTA TREATED, GALV. END FITTINGS
31	CNNCP 016	5	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	18 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
39	CXAGA 001	2	CROSSARM GAIN, GALV.
40	CXAWO 010	1	22' WOOD CROSSARM, TREATED SOUTHERN YELLOW PINE
56	INSSU 007	3	SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 43", CLASS 52-5
58	LUGGR 001	3	LUG FOR 3/4" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
62	NUTSL 004	7	SQUARE LOCK NUT FOR 3/4" BOLT, H.D.G.
64	PLACR 001	2	PLATE, CROSSARM REINFORCING
76	WASRD 005	10	ROUND WASHER FOR 3/4" BOLT, 2" DIAMETER, GALVANIZED
77	WASSC 001	4	SQUARE CURVED WASHER FOR 3/4" BOLTS, GALVANIZED, 4" X 4" SIZE
79	WASSP 005	4	SPRING WASHER FOR 3/4" BOLT, LEAF TYPE, GALVANIZED

IWWSA3*556S

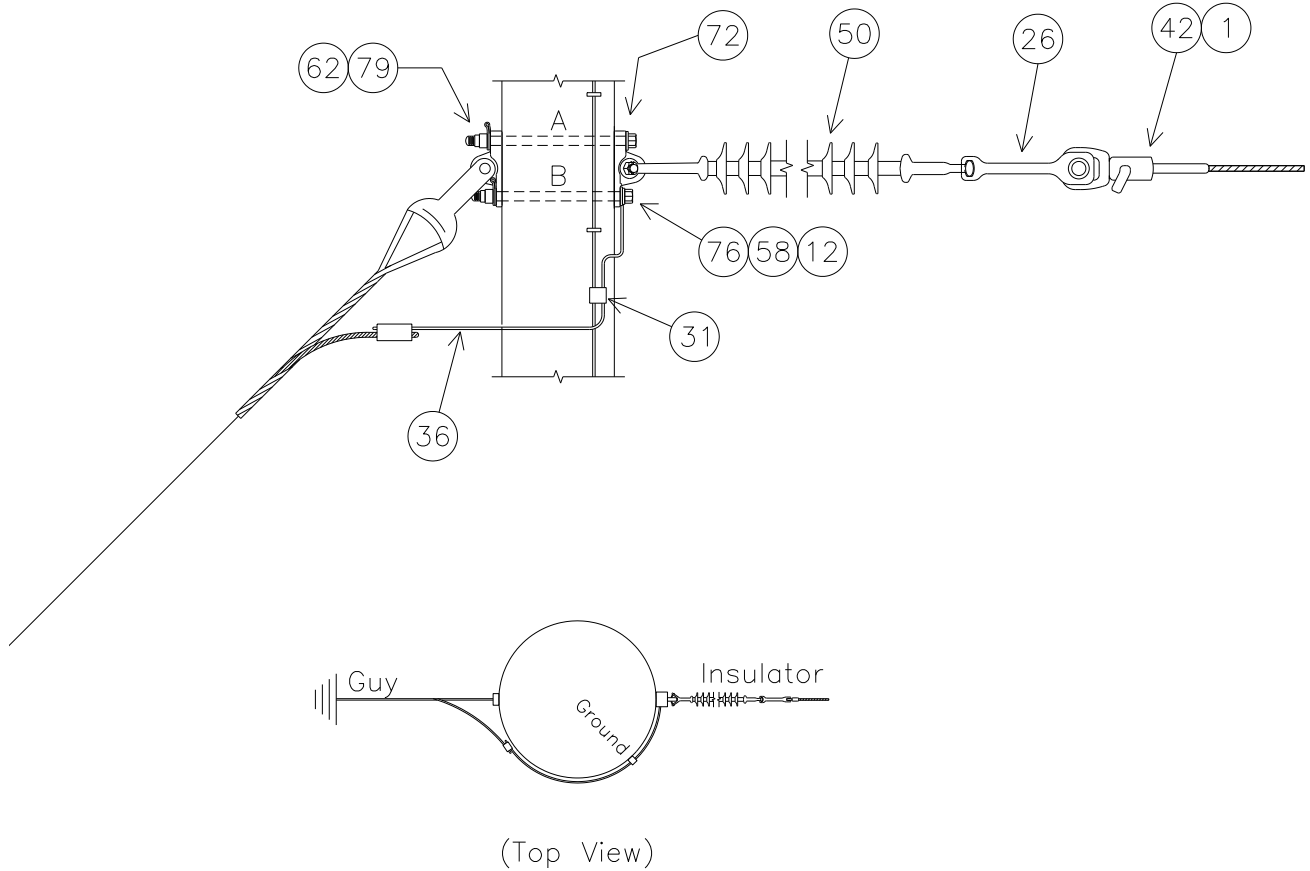
NO.	ITEM ID	QTY	DESCRIPTION
45	GRISA 001	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 556 ASCR
69	SOCEY 004	3	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV. T=3/4"

IWWSA3*954S

NO.	ITEM ID	QTY	DESCRIPTION
45	GRISA 004	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 ASCR
69	SOCEY 003	3	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV. T=3/4"

IWSDFA3

INSULATOR FOR WOOD POLES
SINGLE DEAD-END, FULL TENSION, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 556S, 954S



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

DEADEND INSULATOR	TOP	MIDDLE	BOTTOM
UPPER BOLT 'A' LENGTH (INCHES)	14.6	15.5	16.3
LOWER BOLT 'B' LENGTH (INCHES)	13.2	14.0	14.8

NOTE: BOLT CALCULATIONS ASSUME A 9 INCH POLE TOP DIAMETER

IWSDFA3 PLATES

IWSDFA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
1	ADCVF 001	3	VOID FILLER COMPOUND FOR DEADEND ASSEMBLY
12	BOLMS 048	1	MACHINE BOLT, 7/8" X 14", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 049	4	MACHINE BOLT, 7/8" X 16", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 050	1	MACHINE BOLT, 7/8" X 18", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
31	CNNCP 016	3	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	9 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
72	TEEDE 002	6	TEE, MALLIABLE IRON, FOR WOOD POLE APPLICATION, H.D.G., 6" HOLE SPACING
76	WASRD 006	6	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
79	WASSP 006	6	SPRING WASHER FOR 7/8" BOLT, LEAF TYPE, GALVANIZED

IWSDFA3*556S

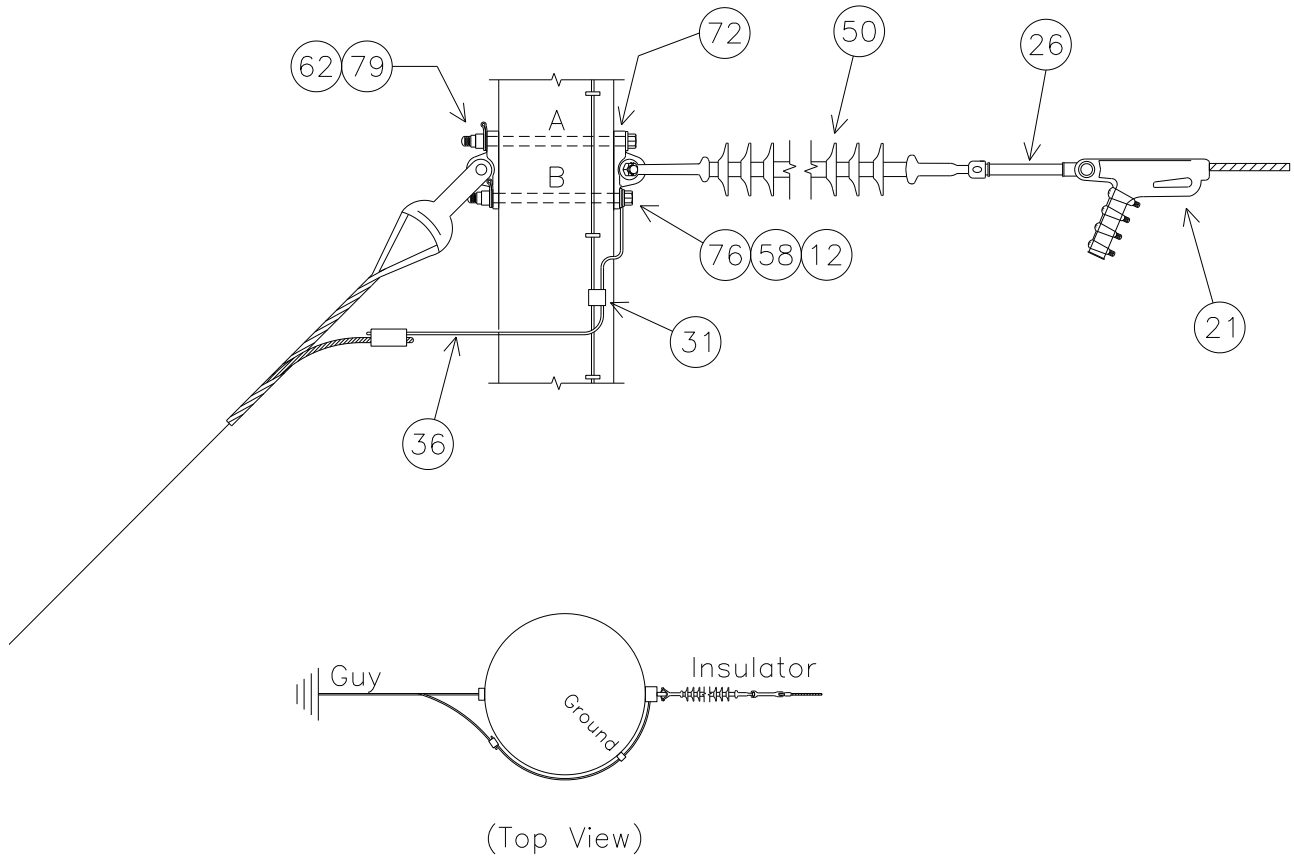
NO.	ITEM ID	QTY	DESCRIPTION
26	CLEHL 004	3	SOCKET-Y CLEVIS, CLASS 52-3/5, L = 11", HOT DIPPED GALV.
42	DEACB 003	3	DEADEND COMPRESSION ASSEMBLY FOR 556 ACSR, OVAL EYE
50	INSSU 008	3	SUSPENSION SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-3/5

IWSDFA3*954S

NO.	ITEM ID	QTY	DESCRIPTION
26	CLEHL 005	3	SOCKET-Y CLEVIS, CLASS 52-8/11, L = 11", PIN = 7/8" HOT DIPPED GALV.
42	DEACB 005	3	DEADEND COMPRESSION ASSEMBLY FOR 954 ACSR, OVAL EYE
50	INSDE 004	3	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11

IWSDSA3

INSULATOR FOR WOOD POLES
SINGLE DEAD-END, SLACK TENSION, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 556S, 954A, 954S



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

DEADEND INSULATOR	TOP	MIDDLE	BOTTOM
UPPER BOLT 'A' LENGTH (INCHES)	14.7	15.5	16.3
LOWER BOLT 'B' LENGTH (INCHES)	13.2	14.0	14.8

NOTE: BOLT CALCULATIONS ASSUME A 9 INCH POLE TOP DIAMETER

IWSDSA3 PLATES

IWSDSA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 048	1	MACHINE BOLT, 7/8" X 14", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 049	4	MACHINE BOLT, 7/8" X 16", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 050	1	MACHINE BOLT, 7/8" X 18", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
26	CLEHL 008	3	SOCKET-EYE CLEVIS, CLASS 52-8/11, L = 10", EYE = 3/4" THICK W/ 13/16 OPENING, H. D. G.
31	CNNCP 016	3	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	9 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
50	INSDE 004	3	DEADEND SILICON INSULATOR, Y-BALL COUPLING, 69KV, L = 66", CLASS 52-8/11
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATTED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8" BOLT, H.D.G.
72	TEEDE 002	6	TEE, MALLIABLE IRON, FOR WOOD POLE APPLICATION, H.D.G., 6" HOLE SPACING
76	WASRD 006	6	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
79	WASSP 006	6	SPRING WASHER FOR 7/8" BOLT, LEAF TYPE, GALVANIZED

IWSDSA3*556S

NO.	ITEM ID	QTY	DESCRIPTION
21	CLAQD 005	3	DEADEND CLAMP (.7 – 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"

IWSDSA3*954A

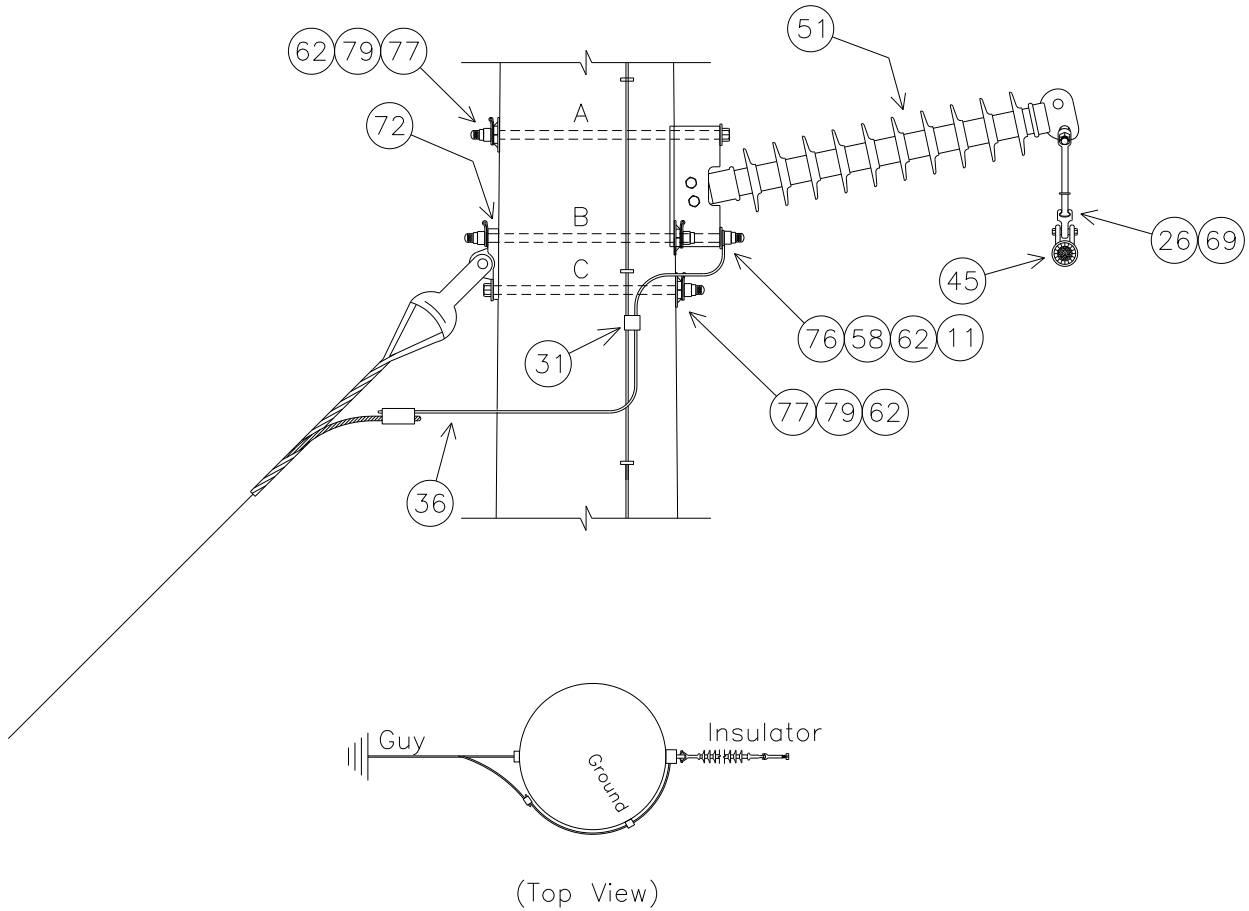
NO.	ITEM ID	QTY	DESCRIPTION
21	CLAQD 005	3	DEADEND CLAMP (.7 – 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"

IWSDSA3*954S

NO.	ITEM ID	QTY	DESCRIPTION
21	CLAQD 005	3	DEADEND CLAMP (.7 – 1.39") 35,000# STRENGTH, GAP = 1 7/16", PIN = 3/4"

IWSPBGLA3

INSULATOR FOR WOOD POLES
SINGLE POST, BOTTOM GUYED, LONG CLEVIS, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 556S, 954A, 954S



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	Top	Mid	Bottom
BOLT 'A' LENGTH (INCHES)	18.0	18.8	19.6
BOLT 'B' LENGTH (INCHES) DA	19.3	20.1	20.9
BOLT 'C' LENGTH (INCHES)	13.1	13.9	14.7

NOTE: BOLT CALCULATIONS ASSUME A 9 INCH POLE TOP DIAMETER

IWSPBGLA3 PLATES

IWSPBGLA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
11	BOLDA 034	3	DOUBLE ARMING BOLT, 7/8" X 22", WITH 4 SQUARE NUTS ATTACHED
12	BOLMS 048	2	MACHINE BOLT, 7/8" X 14", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 049	1	MACHINE BOLT, 7/8" X 16", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
12	BOLMS 051	3	MACHINE BOLT, 7/8" X 20", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
26	CLEHL 001	3	BALL-Y CLEVIS, CLASS 52-3/5, STRENGTH = 30,000#, L > 9", PIN = 3/4", HOT DIPPED GALV.
31	CNNCP 016	3	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	9 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
51	INSHP 020	3	HORIZONTAL POST INSULATOR, 69KV, L = 45", GAIN BASE, 12° RISE
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	12	SQUARE LOCK NUT FOR 7/8 INCH BOLT, HOT DIPPED GALVANIZED
69	SOCEY 004	3	SOCKET - EYE, STENGTH = 25,000#, L = 2 1/2", EYE = 13/16", FORGED STEEL, GALV.
72	TEEDE 002	1	TEE, MALLIABLE IRON, FOR WOOD POLE APPLICATION, H.D.G., 6" HOLE SPACING
76	WASRD 006	9	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 002	9	SQUARE CURVED WASHER FOR 7/8" BOLTS, RIBBED MALLEABLE IRON-GALVANIZED, 4" X 4"
79	WASSP 006	12	SPRING WASHER FOR 7/8" BOLT, LEAF TYPE, GALVANIZED

IWSPBGLA3*556S

45	GRISA 001	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 556 ASCR
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IWSPBGLA3*954A

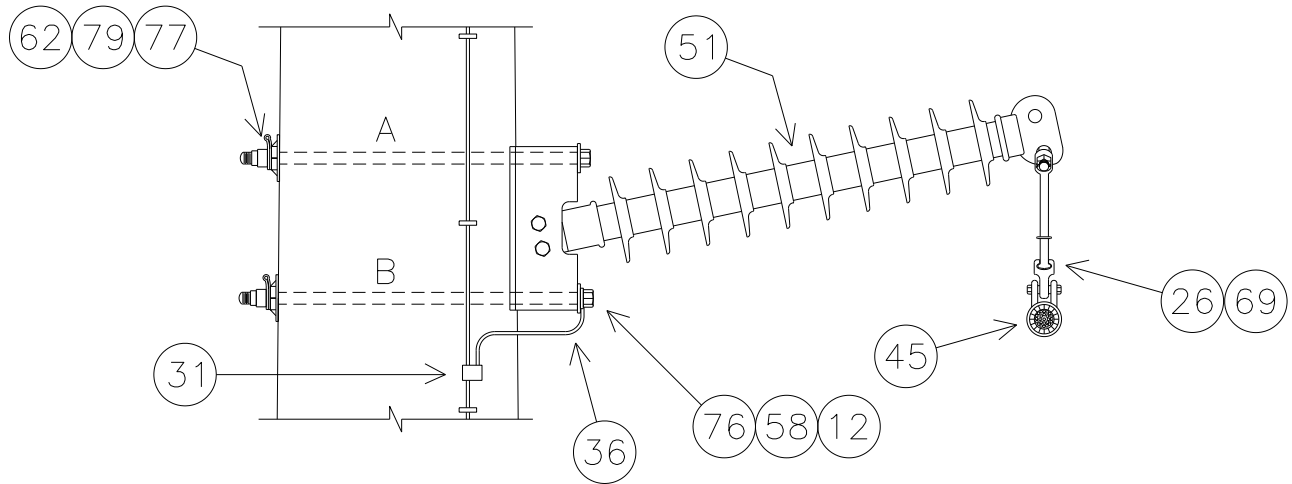
45	GRISA 003	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 AAC, 82 INCHES, 1 3/16" GAP, 5/8" PIN
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IWSPBGLA3*954S

45	GRISA 004	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 ACSR, 82 INCHES, 1 3/16" GAP, 5/8" PIN
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IWSPNLA1

INSULATOR FOR WOOD POLES
SINGLE POST, NO GUY, LONG CLEVIS, 69KV, 3-PHASE
 CONDUCTOR OPTIONS: 556S, 954A, 954S



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	
BOLT 'A' LENGTH (INCHES)	18.8
BOLT 'B' LENGTH (INCHES)	19.2

NOTE: BOLT CALCULATIONS ASSUME A 9 INCH POLE TOP DIAMETER.

IWSPNLA1 PLATES

IWSPNLA1 BASE

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 051	2	MACHINE BOLT, 7/8" X 20", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
26	CLEHL 001	1	BALL-Y CLEVIS, CLASS 52-3/5, STRENGTH = 30,000#, L > 9", PIN = 3/4", HOT DIPPED GALV.
31	CNNCP 016	1	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	2 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
51	INSHP 020	1	HORIZONTAL POST INSULATOR, 69KV, L = 45", GAIN BASE, 12° RISE
58	LUGGR 002	1	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	2	SQUARE LOCK NUT FOR 7/8 INCH BOLT, HOT DIPPED GALVANIZED
76	WASRD 006	2	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 002	2	SQUARE CURVED WASHER FOR 7/8" BOLTS, RIBBED MALLEABLE IRON-GALVANIZED, 4" X 4"
79	WASSP 006	2	SPRING WASHER FOR 7/8" BOLT, LEAF TYPE, GALVANIZED

IWSPNLA1*556S

45	GRISA 001	1	ARMOR GRIP SUSPENSION ASSEMBLY FOR 556 ASCR
69	SOCEY 004	1	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV.

IWSPNLA1*954A

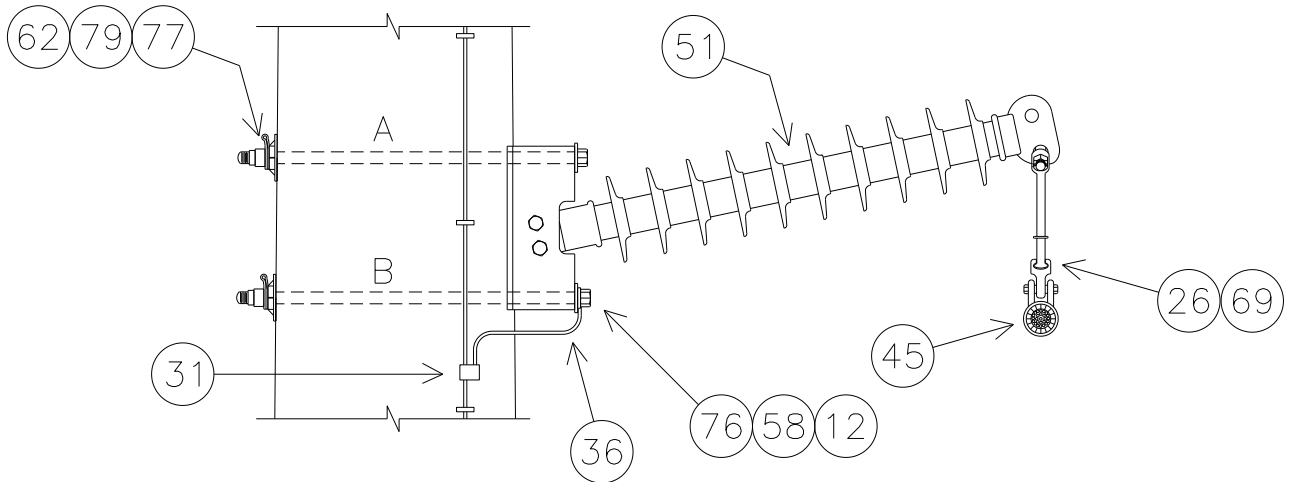
45	GRISA 003	1	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 AAC, 82 INCHES, 1 3/16" GAP, 5/8" PIN
69	SOCEY 003	1	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV.

IWSPNLA1*954S

45	GRISA 004	1	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 ACSR, 82 INCHES, 1 3/16" GAP, 5/8" PIN
69	SOCEY 003	1	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV.

IWSPNLA3

INSULATOR FOR WOOD POLES
SINGLE POST, NO GUY, LONG CLEVIS, 69KV, 3-PHASE
CONDUCTOR OPTIONS: 556S, 954A, 954S



NOTE: SEE MBA1 FOR BOLT ASSEMBLY DETAILS

SUBSTRUCTURE	Top	Mid	Bottom
BOLT 'A' LENGTH (INCHES)	18.0	18.8	19.6
BOLT 'B' LENGTH (INCHES)	18.4	19.2	20.0

NOTE: BOLT CALCULATIONS ASSUME A 9 INCH POLE TOP DIAMETER.

IWSPNLA3 PLATES

IWSPNLA3 BASE

NO.	ITEM ID	QTY	DESCRIPTION
12	BOLMS 051	6	MACHINE BOLT, 7/8" X 20", SQUARE HEAD, GALVANIZED, WITH SQUARE NUT ATTACHED
26	CLEHL 001	3	BALL-Y CLEVIS, CLASS 52-3/5, STRENGTH = 30,000#, L > 9", PIN = 3/4", HOT DIPPED GALV.
31	CNNCP 016	3	COMPRESSION CONNECTOR, #4 SOL. CU. TO #4 SOL. CU., COPPER
36	COBCO 028	6 ft	#4 SOLID BARE COPPER CONDUCTOR, SOFT DRAWN
51	INSHP 020	3	HORIZONTAL POST INSULATOR, 69KV, L = 45", GAIN BASE, 12° RISE
58	LUGGR 002	3	LUG FOR 7/8" BOLT, #4 SOLID WIRE, TIN PLATED COPPER COMPRESSION
62	NUTSL 005	6	SQUARE LOCK NUT FOR 7/8 INCH BOLT, HOT DIPPED GALVANIZED
76	WASRD 006	6	ROUND WASHER FOR 7/8" BOLT, 2 1/2" DIAMETER, GALVANIZED
77	WASSC 002	6	SQUARE CURVED WASHER FOR 7/8" BOLTS, RIBBED MALLEABLE IRON-GALVANIZED, 4" X 4"
79	WASSP 006	6	SPRING WASHER FOR 7/8" BOLT, LEAF TYPE, GALVANIZED

IWSPNLA3*556S

45	GRISA 001	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 556 ASCR
69	SOCEY 004	3	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV.

IWSPNLA3*954A

45	GRISA 003	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 AAC, 82 INCHES, 1 3/16" GAP, 5/8" PIN
69	SOCEY 003	3	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV.

IWSPNLA3*954S

45	GRISA 004	3	ARMOR GRIP SUSPENSION ASSEMBLY FOR 954 ACSR, 82 INCHES, 1 3/16" GAP, 5/8" PIN
69	SOCEY 003	3	SOCKET - EYE, STENGTH = 25,000#, L = 2 5/16", EYE = 13/16", FORGED STEEL, GALV.