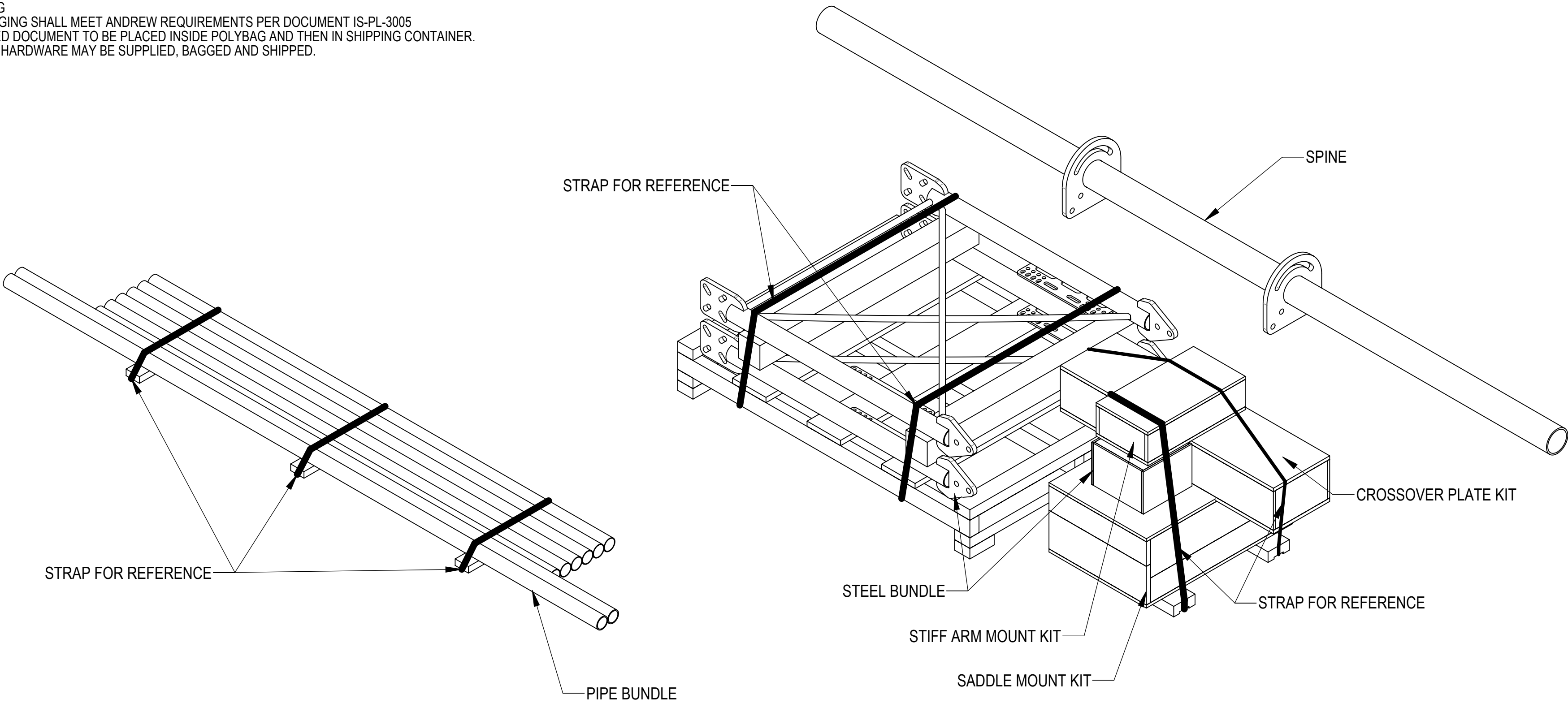


- 1.0 GENERAL NOTES
- 1.1 ALL METRIC DIMENSIONS ARE IN BRACKETS [X.XX]
- 1.2 FOR PATENT INFO: <https://www.adwpat.com>
- 2.0 DESIGN NOTES
- 2.1 ANY HAZARDS OR OBSTRUCTIONS TO THE CLIMBING FACILITY AND SAFETY CLIMB MUST BE IDENTIFIED PRIOR TO INSTALLING THE APPURTENANCE. ADDITIONAL PRODUCTS MAY BE REQUIRED TO MAINTAIN THE INTEGRITY OF THE SAFETY CLIMB. DURING INSTALLATION, TEMPORARY AND/OR PERMANENT PRECAUTIONARY MEASURES SHOULD BE TAKEN TO PRESERVE THE CLIMBING FACILITY AND/OR SAFETY CLIMB.
- 2.2 UP TO 5.0° TAPER AVAILABLE ON MODELS THAT SUPPORT ADJUSTMENT.
- 3.0 MANUFACTURING/SPECIAL REQUIREMENTS
- 3.1 TIGHTEN ALL BOLTS SECURING FLAT PLATES BY THE TURN-OF-NUT METHOD. TIGHTEN ALL U-BOLTS USING TURN-OF-NUT METHOD WITH ATTENTION TO LEAVE EQUAL DISTANCE AND EQUAL FORCE ON EACH LEG OF THE U-BOLT.
- 4.0 TEST
- 5.0 PACKAGING
- 5.1 PACKAGING SHALL MEET ANDREW REQUIREMENTS PER DOCUMENT IS-PL-3005
- 5.2 PRINTED DOCUMENT TO BE PLACED INSIDE POLYBAG AND THEN IN SHIPPING CONTAINER.
- 5.3 EXTRA HARDWARE MAY BE SUPPLIED, BAGGED AND SHIPPED.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	JL1183 13JUN24	CB1094 40195671CMO
B	UPDATED TIE BACK PIPE TO 2.375"; UPDATED TABLE 1 WEIGHT, EPA & INCLUDED PARTS; SHEET 3: ADDED AZIMUTH ADJUSTMENT NOTE	JL1183 02JAN25	YZ1080 40211726CMO



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TOLERANCES						SAP MATERIAL MASTER			
0 PLACE		X[X] ± 0.25[6.3]		2 PLACE		.XX[X] ± 0.06[1.5]		SEE TABLE1	
1 PLACE		X[X] ± 0.12[3.0]		ANGLES		± 2°			
FINISH					MATERIAL				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES INTERPRET PER ANSI Y 14.5M-1994		NAME	DATE	SFG22RHDX SECTOR FRAME SERIES					
	CE	JL1183	05FEB24						
	RW	LL1090	06/11/2025						
				SCALE 1:16 DOCUMENT NO. SFG22RHDX					
	AD	YMENG	06/11/2025						
	RE	YMENG	06/11/2025						
	ECN 40211726CMO								
SIZE	Auth Group	INSL	MODEL			DRAWING			SHEET 1 OF 12
C			VERSION 00	STATUS RE	REVISION A	VERSION 01	STATUS RE	REVISION B	

PART NUMBERS, WEIGHTS, & EPA

TABLE 1: CONFIGURATIONS																			
PART NUMBER	DESCRIPTION	WEIGHT (LBS)	MOUNT EPA W/NO ICE (FT²)			MOUNT EPA W/2" ICE (FT²)			ANTENNA PIPES	INCLUDED PARTS									
			FRONT (EPA)N	SIDE (EPA)T	3-SECTORS (EPA)A	FRONT (EPA)N	SIDE (EPA)T	3-SECTORS (EPA)A		SM-U2080H	DG23	SFG22HDX-HK03	SFG22RHDX-SB01	SFG2204	XP-2525-4	XP-2525-6	XP-2525-8	XP-2525-OFF-4	PB02TEA0211K
SFG22RHDX-11-B	SF,11'FP,NOAP	535.66	9.43	8.60	21.63	13.33	12.80	31.36	-	1	1	1	1	1	-	-	-	-	1
SFG22RHDX-11-3-126	PG,SF,11'FP,(3)126"AP	697.51							3	1	1	1	1	1	-	1	-	-	1
SFG22RHDX-11-3-96	PG,SF,11'FP,(3)096"AP	670.93							3	1	1	1	1	1	-	1	-	-	1
SFG22RHDX-13-B	SF,13'FP,NOAP	561.56	10.49	8.60	22.90	14.74	12.80	33.05	-	1	1	1	1	1	-	-	-	-	-
SFG22RHDX-13-4-120	PG,SF,13'FP,(4)120"AP	770.26							4	1	1	1	1	1	-	-	1	-	-
SFG22RHDX-13-4-126	PG,SF,13'FP,(4)126"AP	777.35							4	1	1	1	1	1	-	-	1	-	-
SFG22RHDX-13-4-96	PG,SF,13'FP,(4)096"AP	741.92							4	1	1	1	1	1	-	-	1	-	-
SFG22RHDX-15-B	SF,15'FP,NOAP	641.06	11.54	8.60	24.17	16.14	12.80	34.74	-	1	1	1	1	1	-	-	-	-	-
SFG22RHDX-15-4-120	PG,SF,15'FP,(4)120"AP	887.91							4	1	1	1	1	1	1	-	-	1	-
SFG22RHDX-15-5-120	PG,SF,15'FP,(5)120"AP	901.94							5	1	1	1	1	1	1	-	-	-	-
SFG22RHDX-12-B	SF,12'FP,NOAP	555.74	10.22	8.60	22.58	14.39	12.80	32.63	-	1	1	1	1	1	-	-	-	-	-
SFG22RHDX-12-4-126	SF,12'FP,(4)126"AP	771.54							4	1	1	1	1	1	-	-	1	-	-
SFG22RHDX-12-4-96	SF,12'FP,(4)096"AP	736.10							4	1	1	1	1	1	-	-	1	-	-

- NOTES:
1. NO MOUNT PIPES CONSIDERED. IF DESIRED, ADD ANTENNA PIPE PER TABLE 2
 2. MOUNT CONNECTION MEMBERS TO TOWER CONSIDERED.
 3. 3-SECTOR EPA INCLUDES KA FACTORS.

TABLE 2: EPA OF EACH ANTENNA PIPE						
ANTENNA PIPE	MOUNT EPA W/NO ICE (FT²)			MOUNT EPA W/2" ICE (FT²)		
	FRONT (EPA)N	SIDE (EPA)T	3-SECTORS (EPA)A	FRONT (EPA)N	SIDE (EPA)T	3-SECTORS (EPA)A
2-7/8" X 96"	2.07	2.07	1.84	2.79	2.79	2.48
2-7/8" X 120"	2.59	2.59	2.30	3.49	3.49	3.10
2-7/8" X126"	2.72	2.72	2.42	3.67	3.67	3.26

- NOTES:
1. ANTENNA PIPES ARE CONSIDERED SEPARATELY.
 2. KA FACTOR OF 3-SECTOR EPA INCLUDED.
 3. COMBINE THE ASSOCIATED EPA VALUES IN THE TABLES ABOVE TO DETERMINE THE EPA OF A MOUNT MODEL WITH A LISTED MOUNT PIPE CONFIGURATION.
FOR EXAMPLE: SFG22RHDX-15-4-120 HAS A FRONT EPA OF 11.54 FT² WITH NO ICE PLUS 4 ANTENNA PIPES WITH A FRONT EPA OF 4X2.59=10.36 FT² WITH NO ICE.
SO, THE TOTAL FRONT EPA SHOULD BE 21.90 FT²; (SIDE EPA SAME METHOD AS FRONT EPA).
WHEN 3 SECTOR FRAMES ARE MOUNTED AT THE SAME RELATIVE ELEVATION IN AN ARRANGEMENT, IT HAS A 3-SECTOR EPA OF 24.17 FT² WITH NO ICE PLUS 4 ANTENNA PIPES WITH A 3-SECTOR EPA OF (4X2.30)X3=27.60 FT² WITH NO ICE. SO, THE TOTAL 3-SECTOR EPA SHOULD BE 51.77 FT².



TITLE

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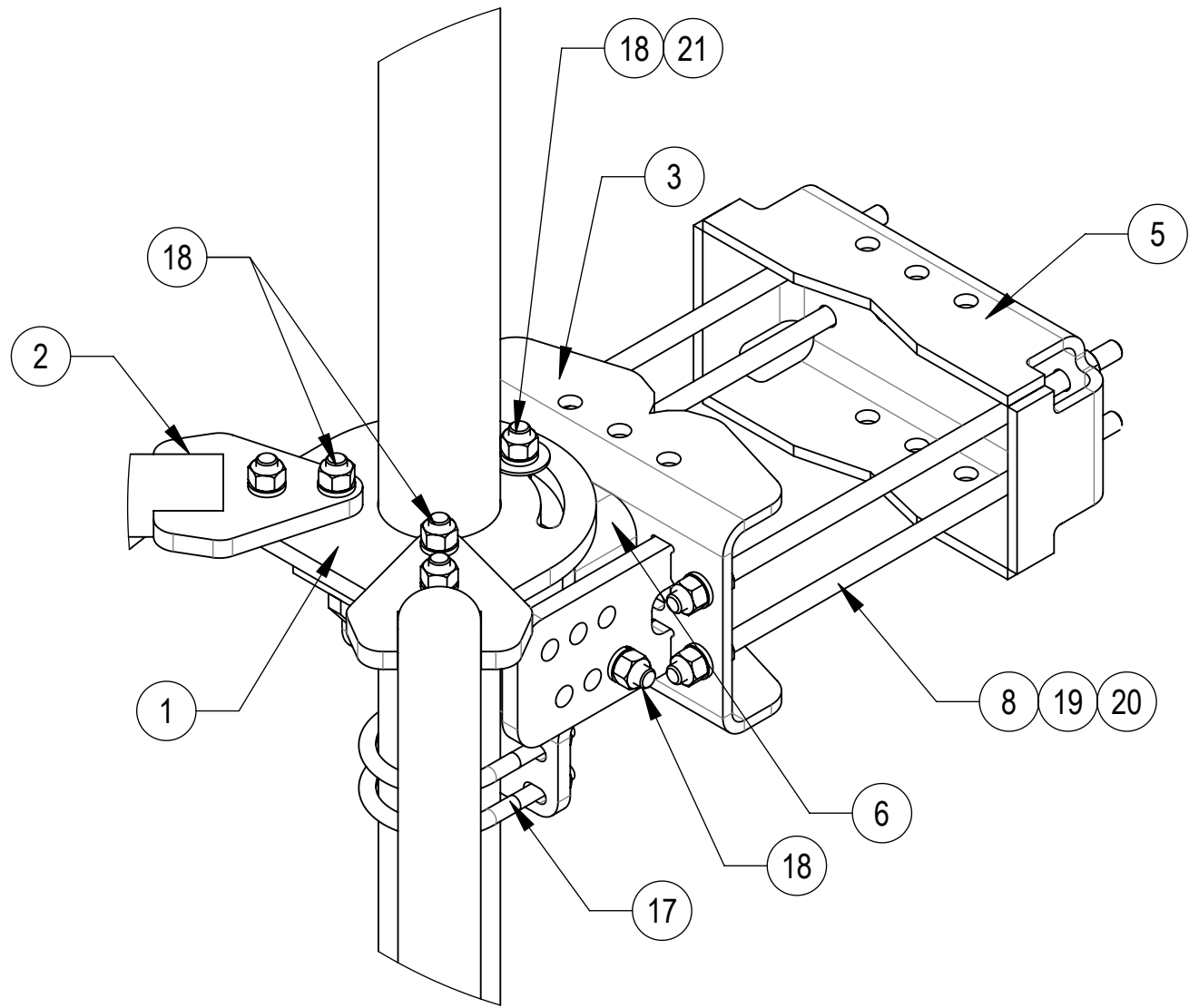
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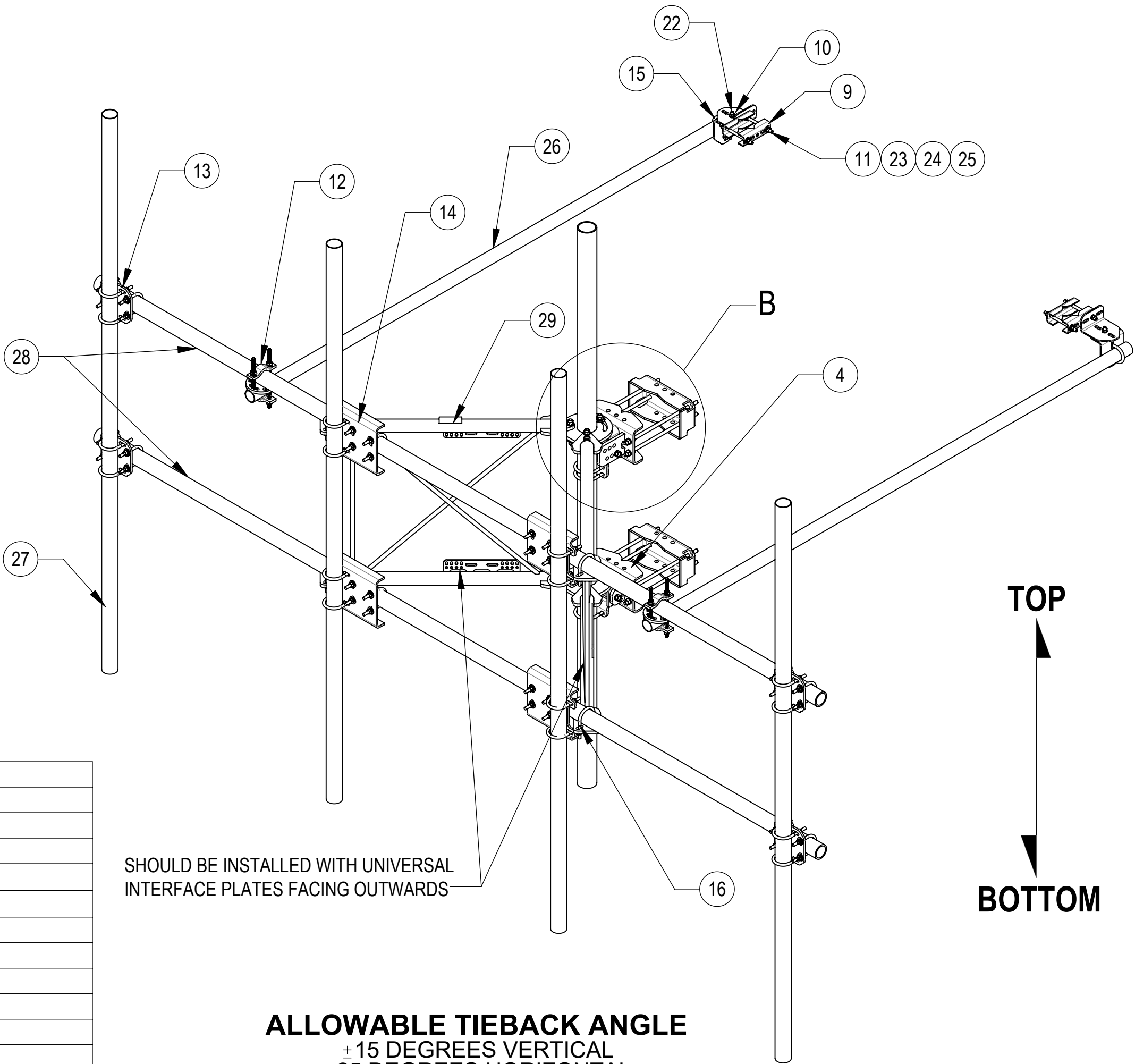


DETAIL B
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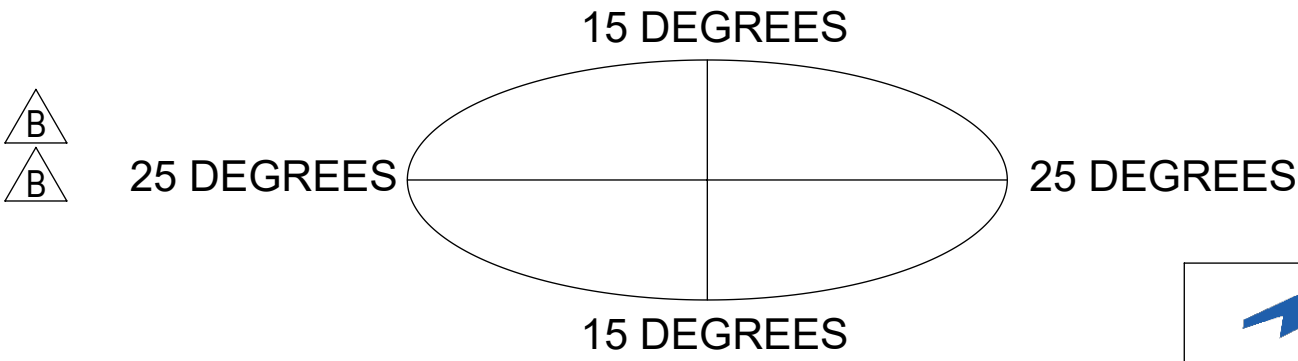
SFG22RHDX-15-4-120 SHOWN FOR REFERENCE
(NOT ALL CONFIGURATIONS INCLUDE ALL ITEMS, SEE NOTES IN TABLE)

COMPONENT PART NUMBERS PROVIDED FOR ASSEMBLY PURPOSES;
INDIVIDUAL COMPONENTS MAY BE SHIPPED AS PARTS WITHIN AN INCLUDED KIT.

ITEM	PART NO.	DESCRIPTION	QTY.	WEIGHT	NOTE NO.
1	SFG2204	WELDMENT, BACK VERTICAL ARM MOUNT	1	97.29 LBS	
2	SFG2292-00	WELDMENT, V-ARM, SECTOR FRAME 22	2	49.69 LBS	
3	SFG2380	WELDMENT, HD, TOP TAPER BRACKET	1	22.78 LBS	
4	SFG2381	WELDMENT, HD, LOWER TOWER LEG BRACKET	1	17.42 LBS	
5	SFG2289	G2 RRU BACK CLAMP, HD	2	18.65 LBS	
6	SFG2386	WELDMENT, SFG2 AZIMUTH BRACKET	1	10.07 LBS	
7	SFG2397-00	WELDMENT, G23 AZIMUTH BRACKET	1	7.94 LBS	
8	MT-382-18	5/8" X 18" THREADED ROD	8	1.43 LBS	
9	SAB01	FORMED CLAMP	4	1.35 LBS	
10	XAU01	ANGLE, CROSSOVER, 1.9-3.5" X 1.9-3.5" OD	4	2.98 LBS	
11	MT-379-8	1/2" X 8" GALV THREADED ROD	4	0.45 LBS	
12	XP-R	CROSSOVER PLATE, ROUND, UP TO 3.5" OD	2	6.20 LBS	
13	XP-2525	CROSSOVER PLATE KIT, 2-7/8 OD X 2-7/8 OD	4	8.37 LBS	PART NO. AND QTY SEE INDIVIDUAL DRAWING
14	XP-2525-OFF	OFFSET CO PLATE KIT, 2-7/8ODX2-7/8OD	4	17.91 LBS	PART NO. AND QTY SEE INDIVIDUAL DRAWING
15	GUB-4240	1/2" X 2-1/2" X 4" GALV U-BOLT	2	0.56 LBS	
16	GUB-4352	1/2" X 3" X 5-1/4" GALV U-BOLT	4	0.71 LBS	
17	GUB-4355	1/2" X 3-5/8" X 5" GALV U-BOLT	3	0.71 LBS	
18	GB-05225	5/8" X 2-1/4" GALV BOLT KIT	14	0.28 LBS	
19	GN-05	5/8" GALV HEX NUT	24	0.08 LBS	
20	GWL-05	5/8" GALV LOCK WASHER	16	0.03 LBS	
21	GWF-05	5/8" GALV FLAT WASHER, 1.7OD	2	0.06 LBS	
22	GB-04145	1/2" X 1-1/2" GALV BOLT KIT	2	0.13 LBS	
23	GN-04	1/2" GALV HEX NUT	10	0.04 LBS	
24	GWL-04	1/2" GALV LOCK WASHER	10	0.01 LBS	
25	GWF-04	1/2" GALV FLAT WASHER	8	0.04 LBS	
26	MT-651-120	PIPE, 2.375"OD X 120"	2	29.07 LBS	
27	MT546120120	PIPE, 2.875"OD X 120"	4	35.44 LBS	PART NO. AND QTY SEE INDIVIDUAL DRAWING
28	MT546180276	PIPE, 2.875"OD X 180"	2	115.33 LBS	PART NO. SEE INDIVIDUAL DRAWING
29	SFG2295	LABEL, SFG23RHDX	1	0.03 LBS	



ALLOWABLE TIEBACK ANGLE
± 15 DEGREES VERTICAL
± 25 DEGREES HORIZONTAL





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TITLE

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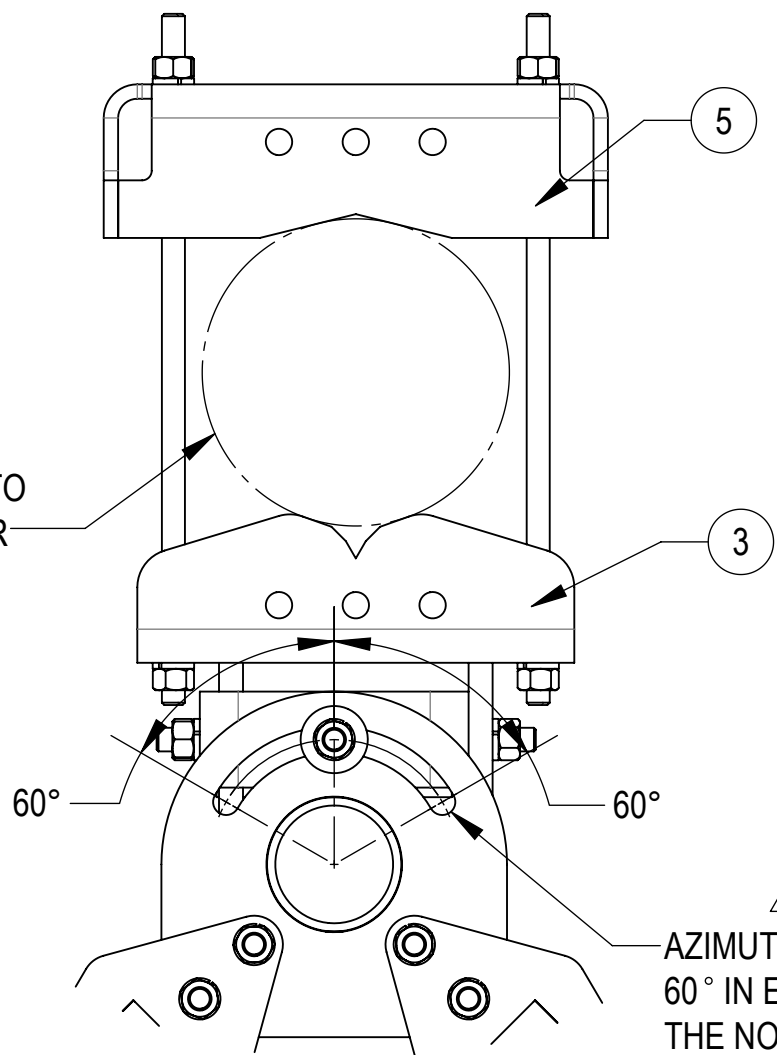
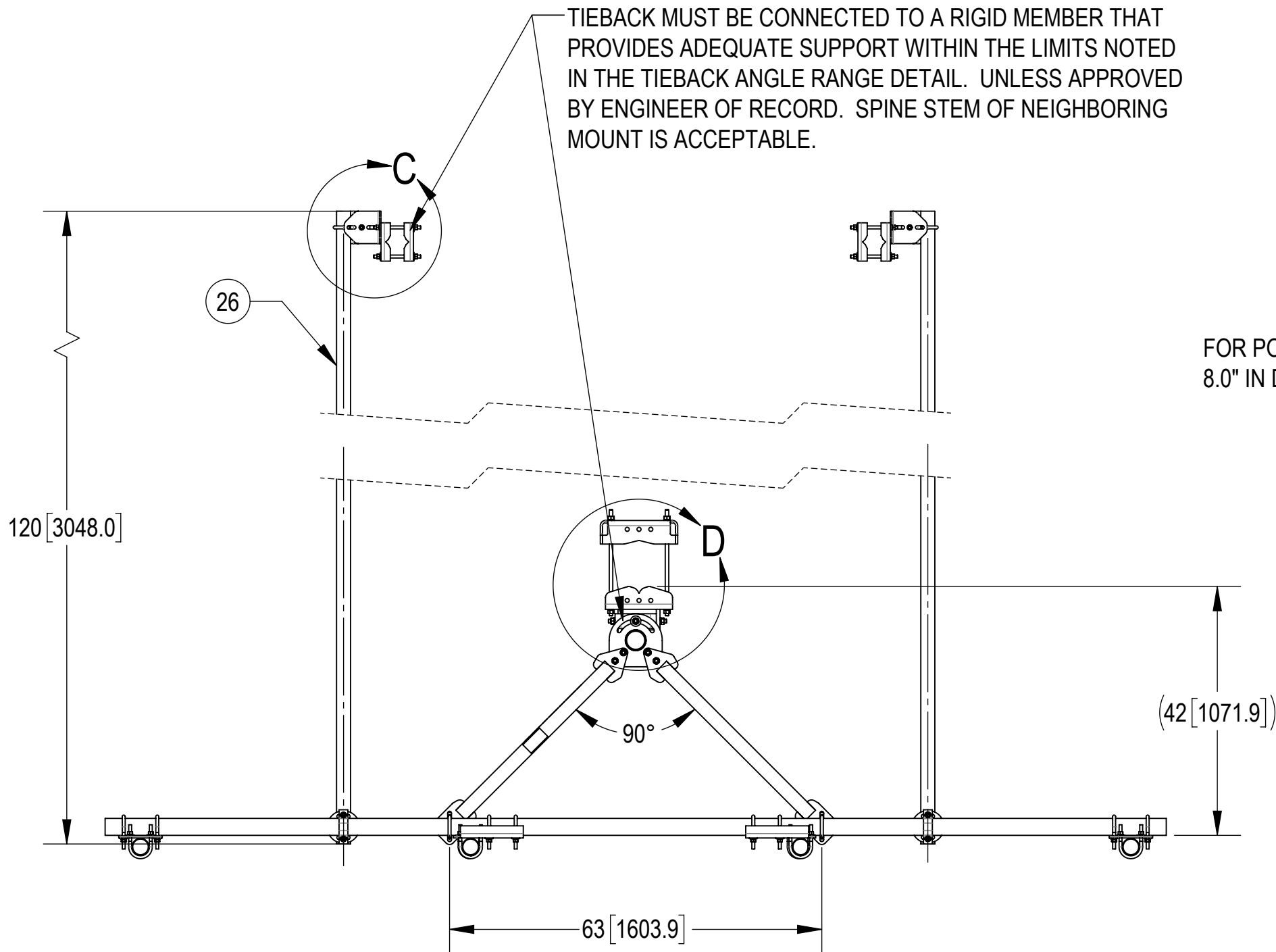
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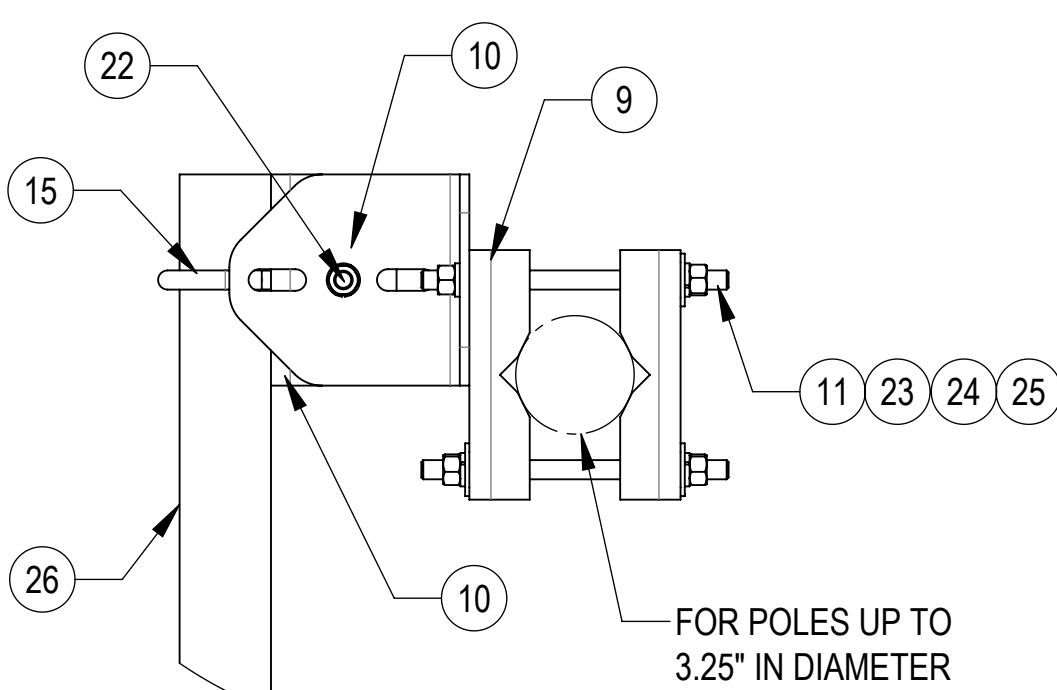
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TIEBACK MUST BE CONNECTED TO A RIGID MEMBER THAT PROVIDES ADEQUATE SUPPORT WITHIN THE LIMITS NOTED IN THE TIEBACK ANGLE RANGE DETAIL. UNLESS APPROVED BY ENGINEER OF RECORD. SPINE STEM OF NEIGHBORING MOUNT IS ACCEPTABLE.

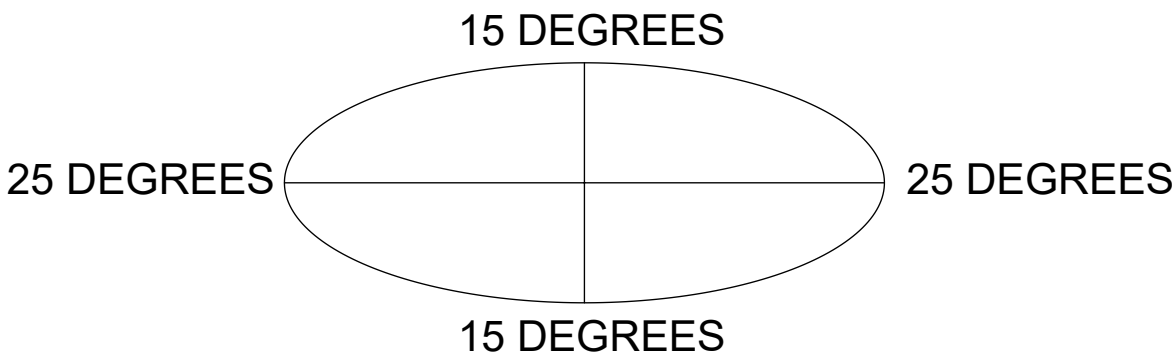


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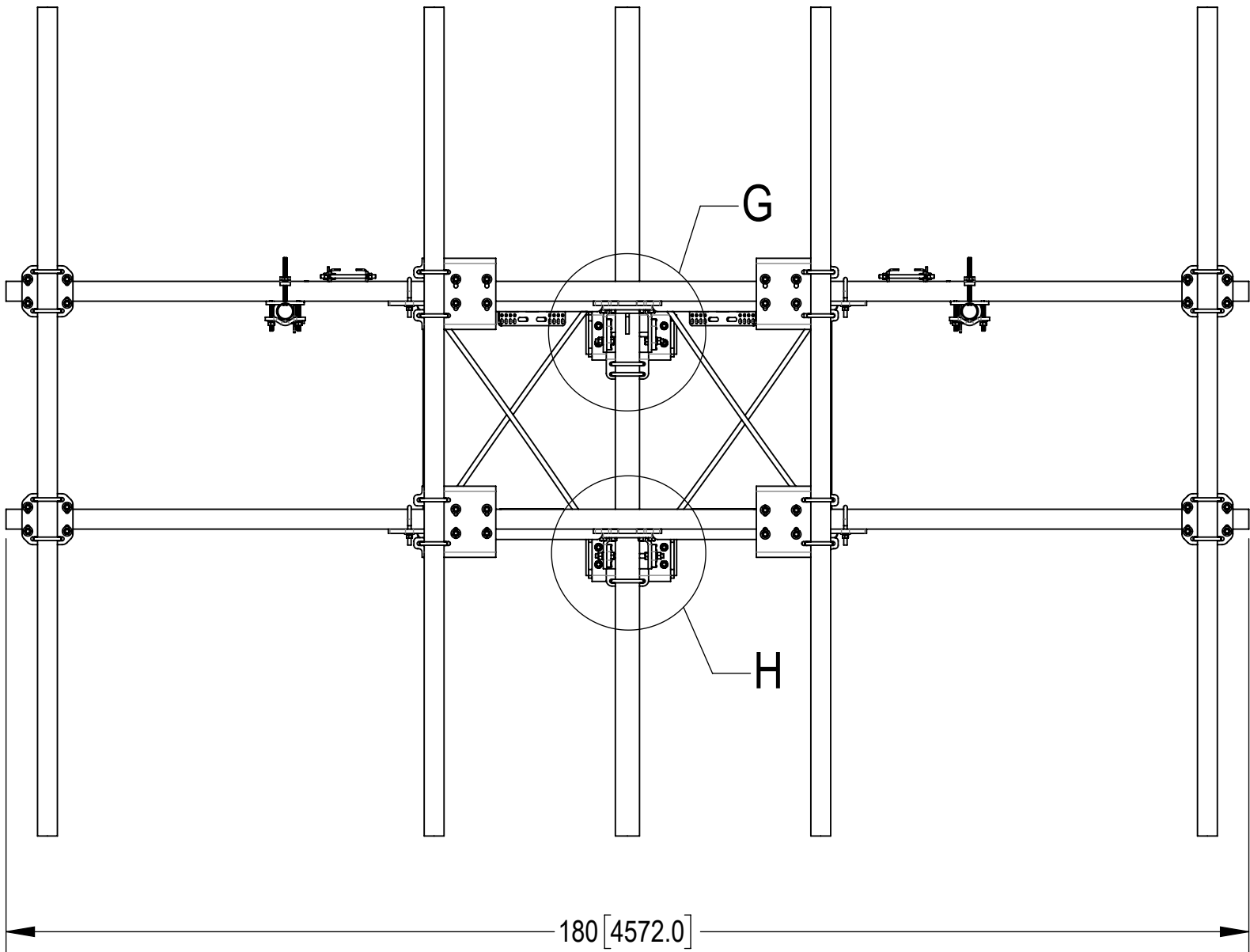


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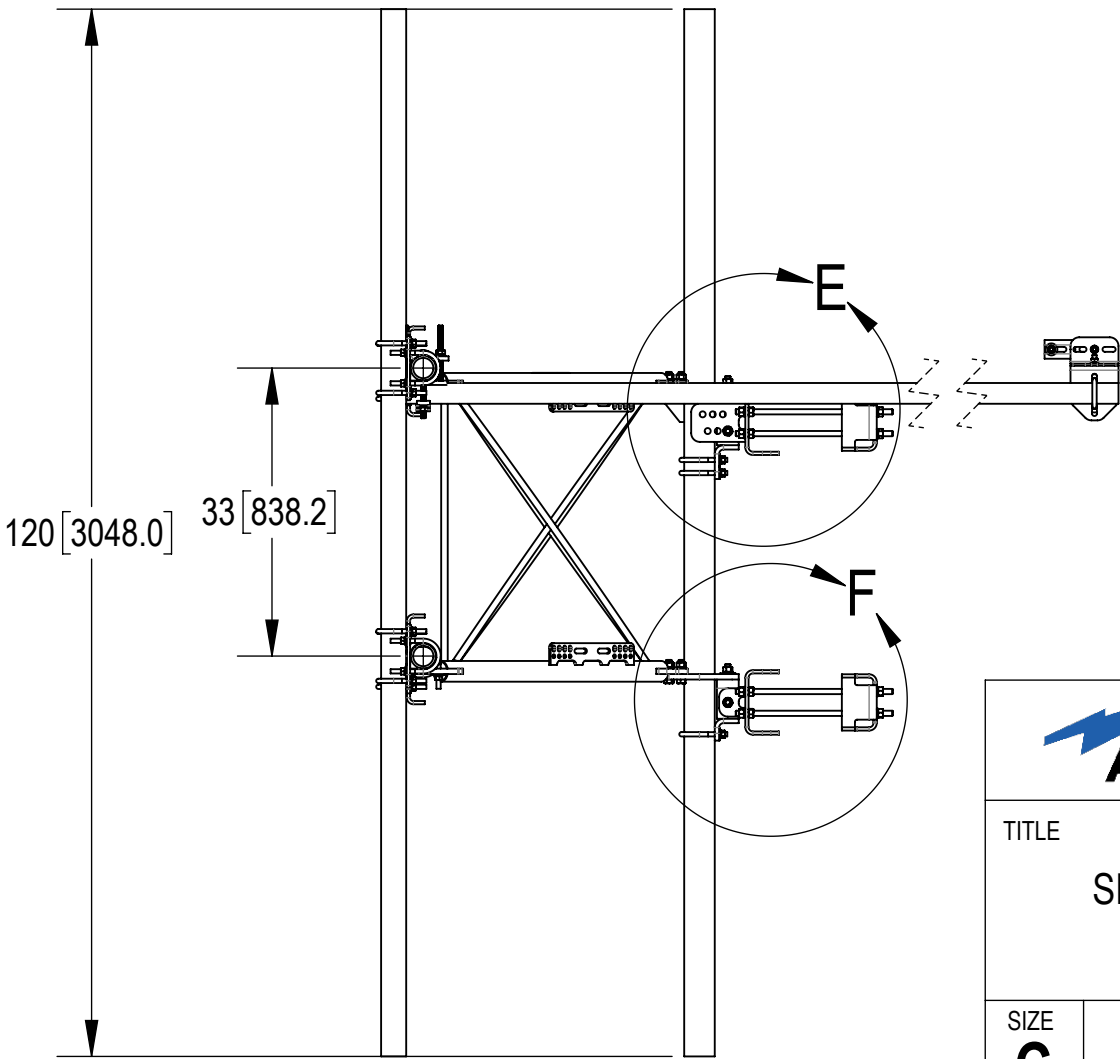
ALLOWABLE TIEBACK ANGLE
±15 DEGREES VERTICAL
±25 DEGREES HORIZONTAL



SFG22RHDX-15-4-120 SHOWN FOR REFERENCE
(NOT ALL CONFIGURATIONS INCLUDE ALL ITEMS,
SEE NOTES IN TABLE ON PAGE 3)



TOP
BOTTOM



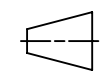
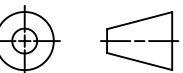
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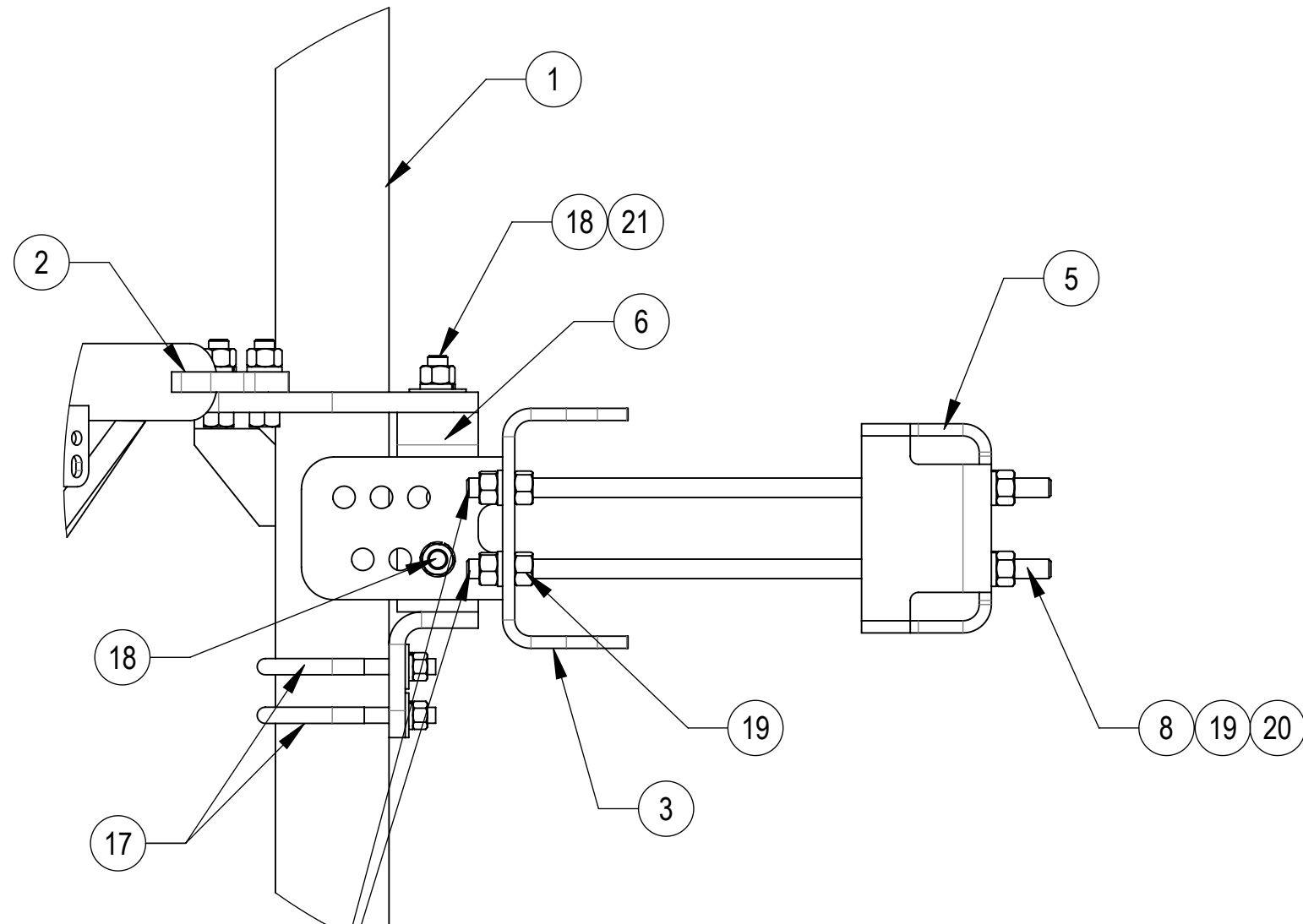
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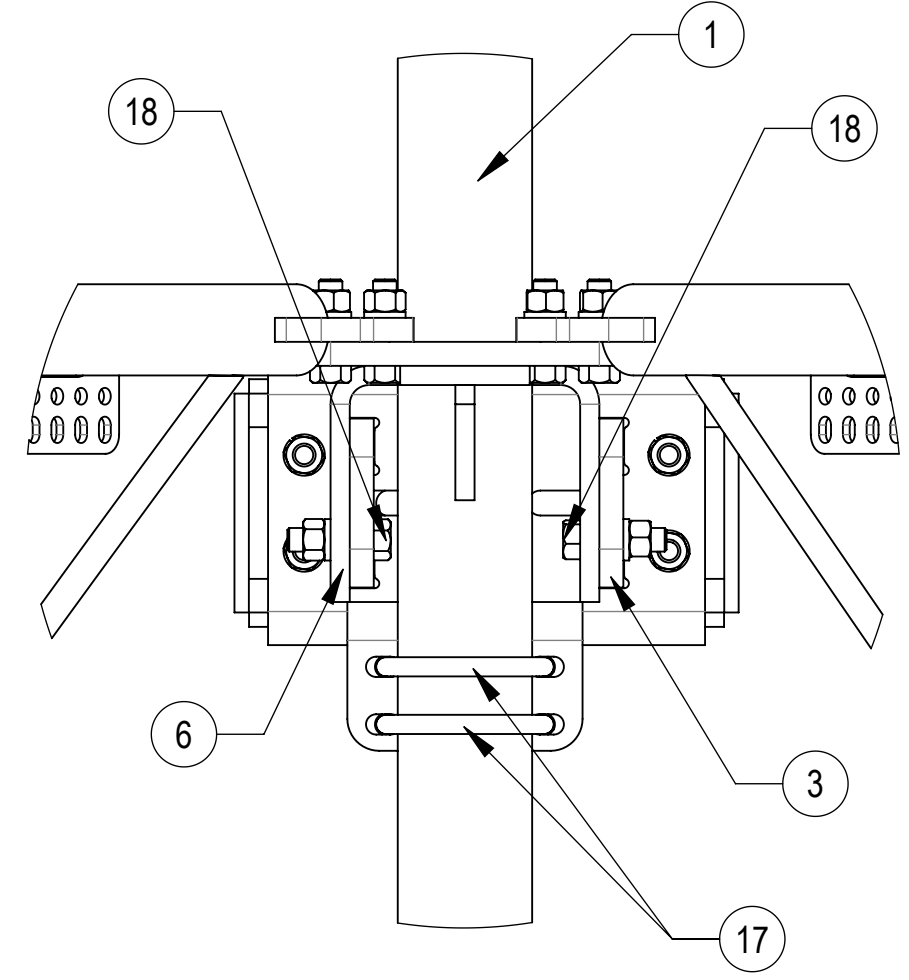
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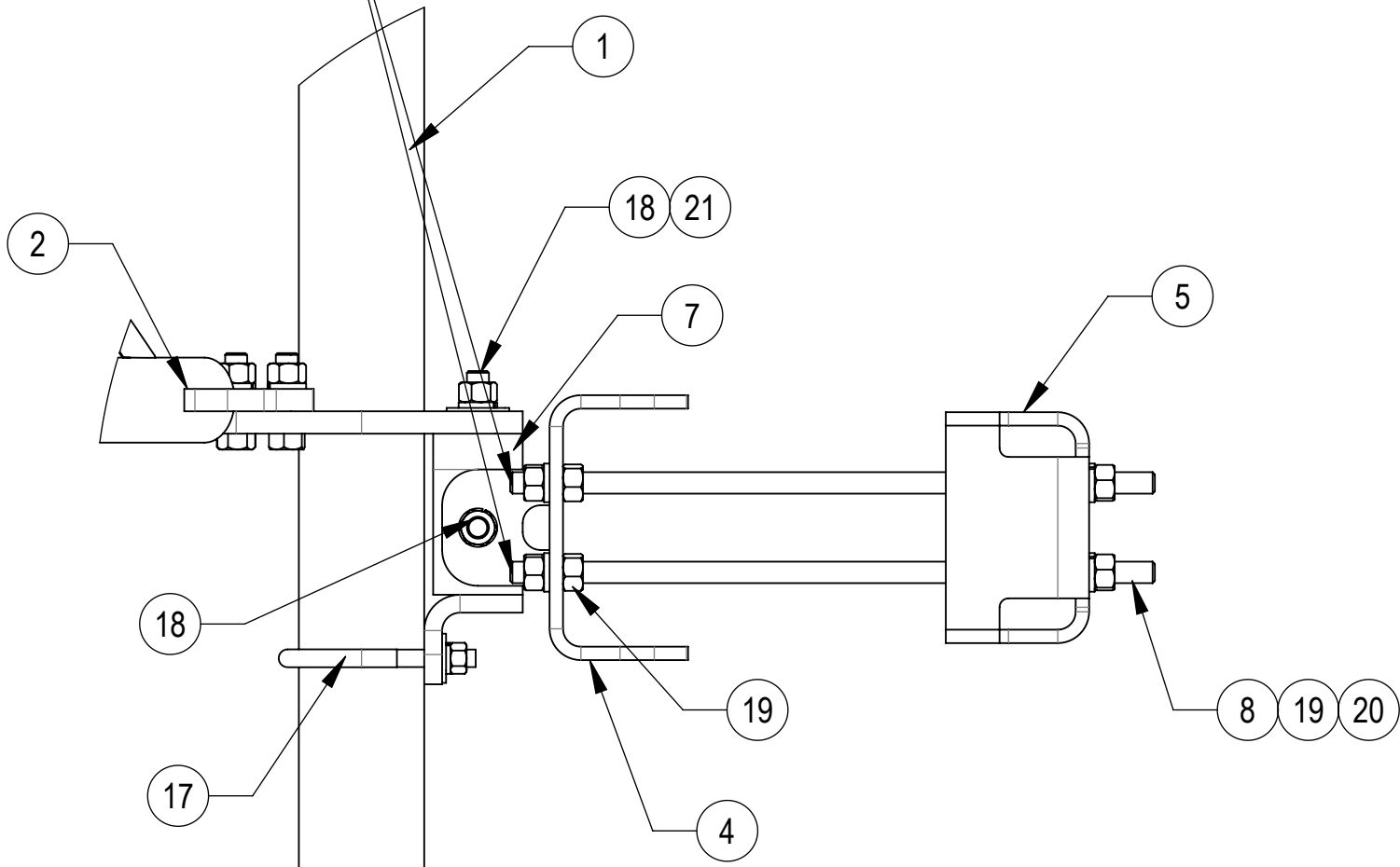
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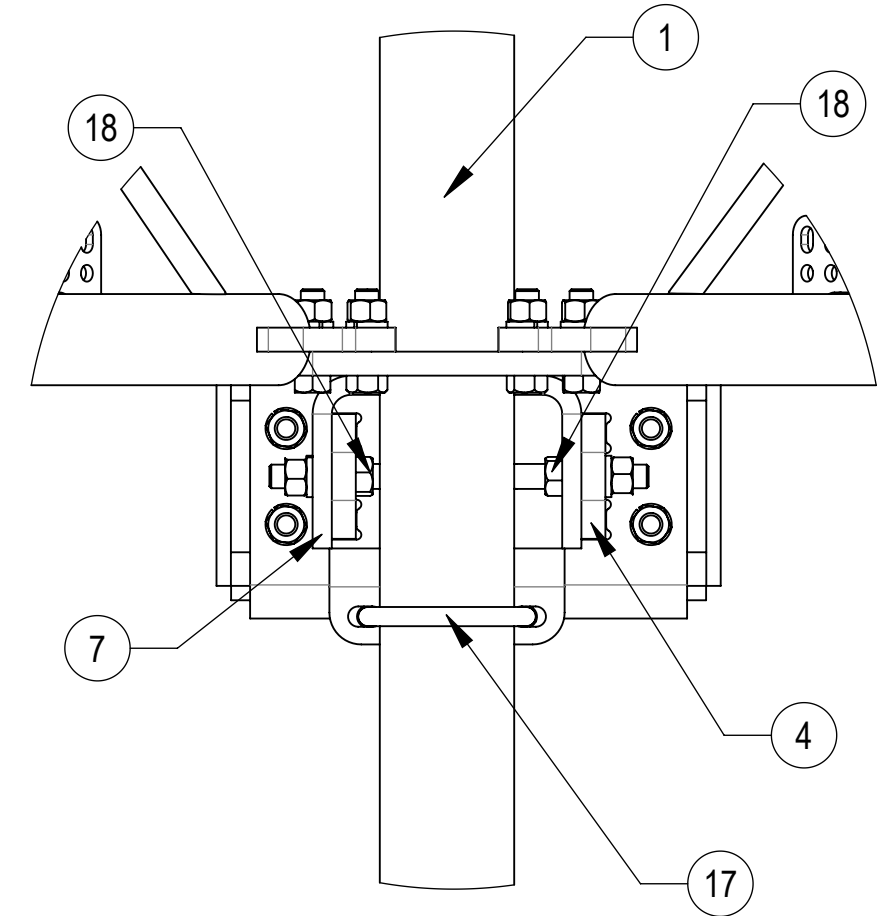
DETAIL E
SCALE 1 : 5



DETAIL G
SCALE 1 : 5



DETAIL F
SCALE 1 : 5



DETAIL H
SCALE 1 : 5

THE THREADED ROD CAN ONLY EXPOSE 4 TO 7 THREADS ON ONE SIDE OF THE BRACKET, WHICH IS TO PREVENT INTERFERENCE WITH THE SIDE BOLTS



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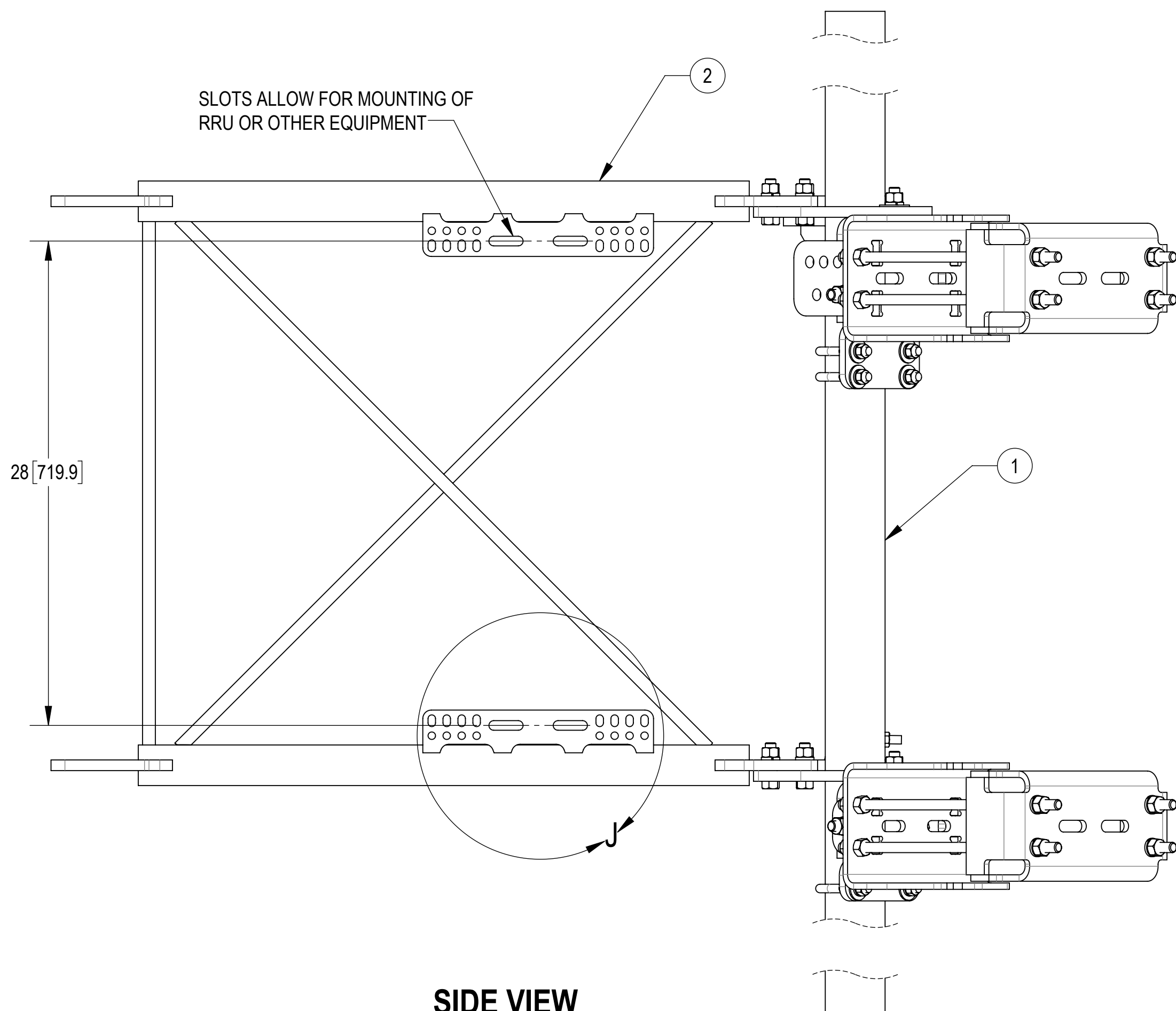
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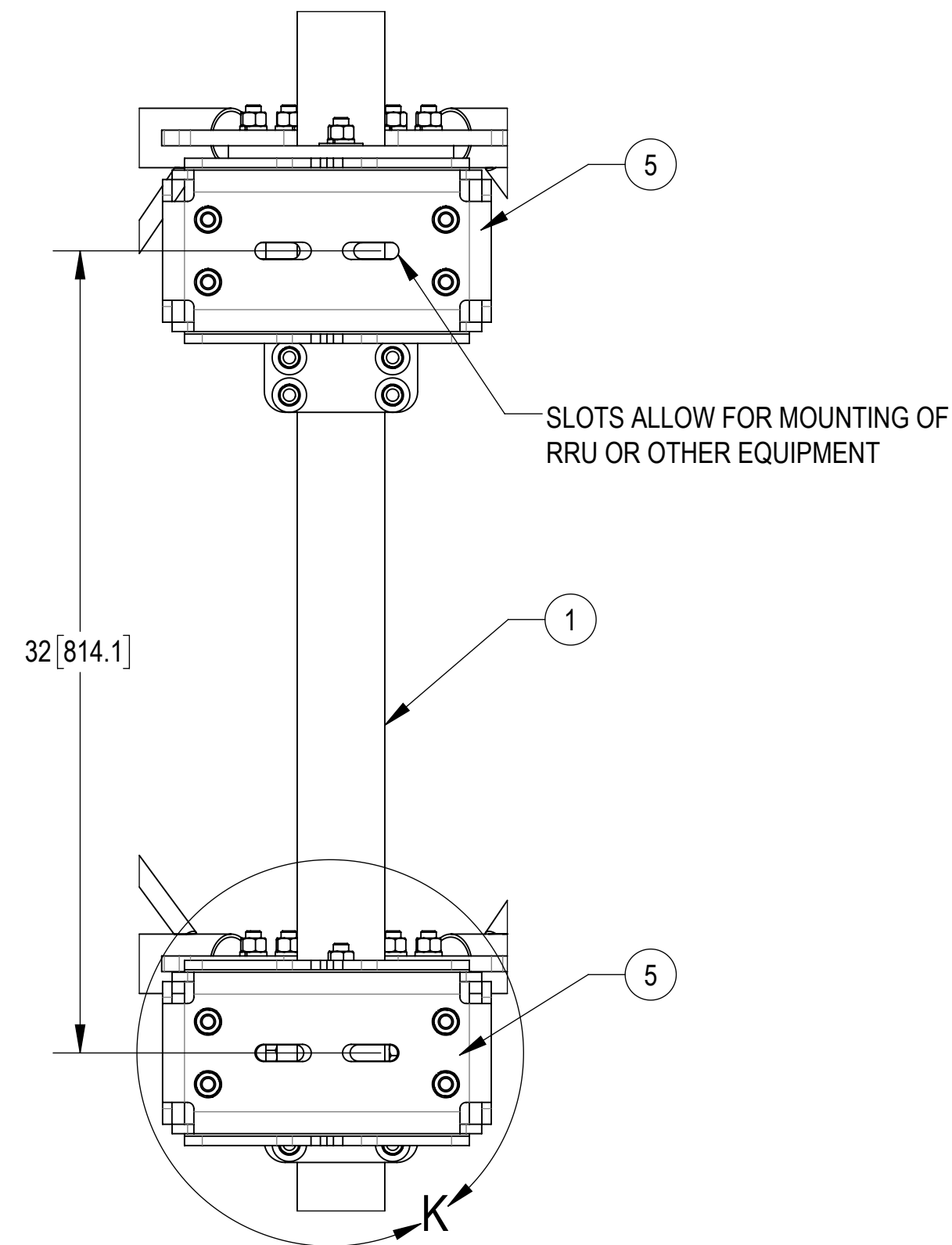
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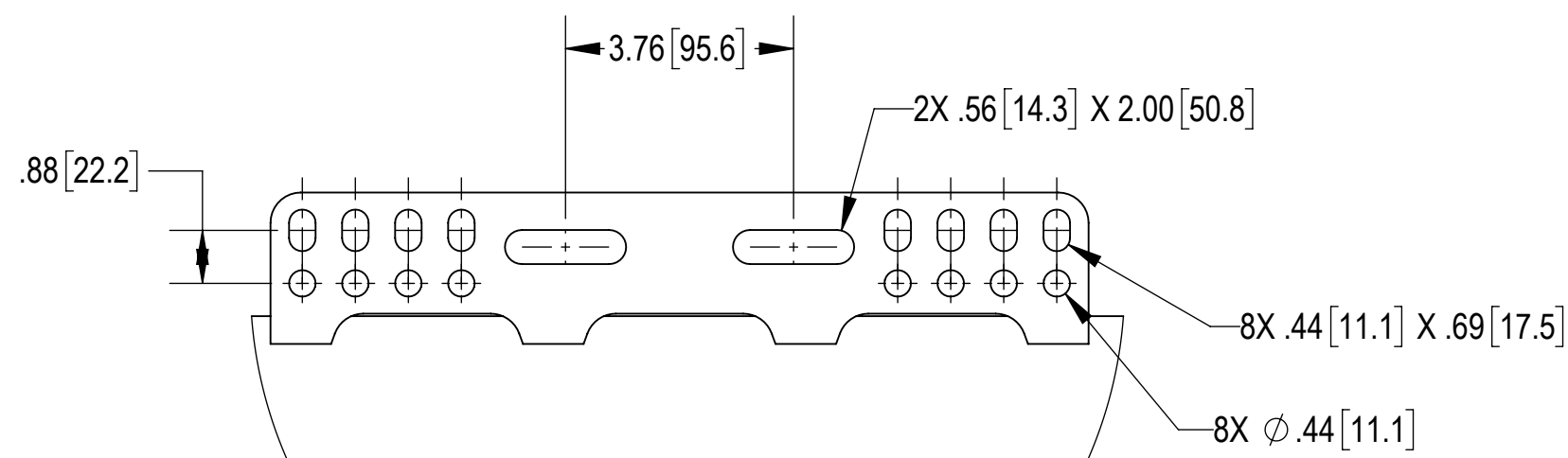
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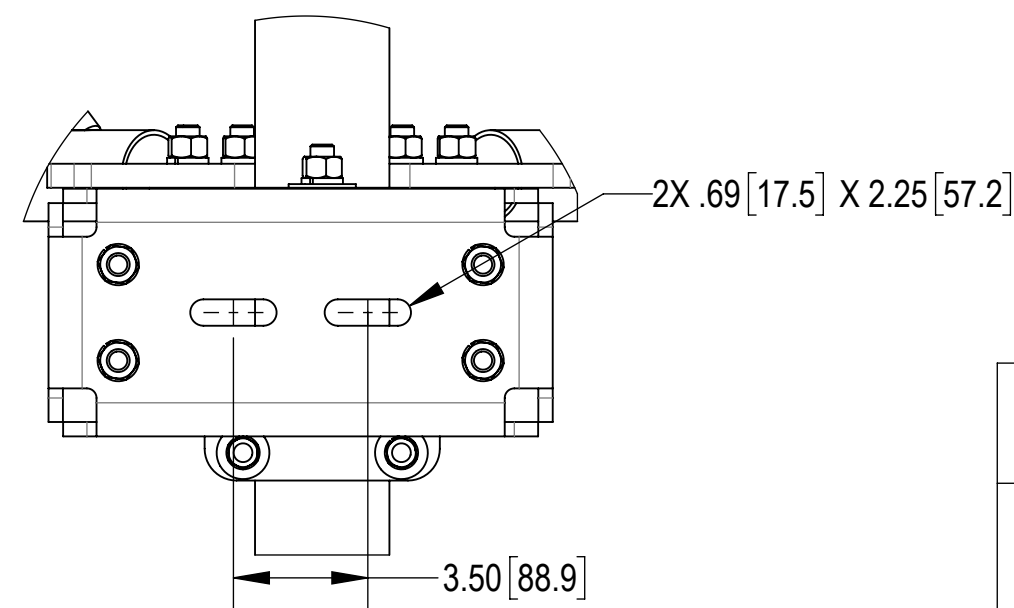
SIDE VIEW



BACK CROP VIEW



DETAIL J
SCALE 1 : 3



DETAIL K
SCALE 1 : 5

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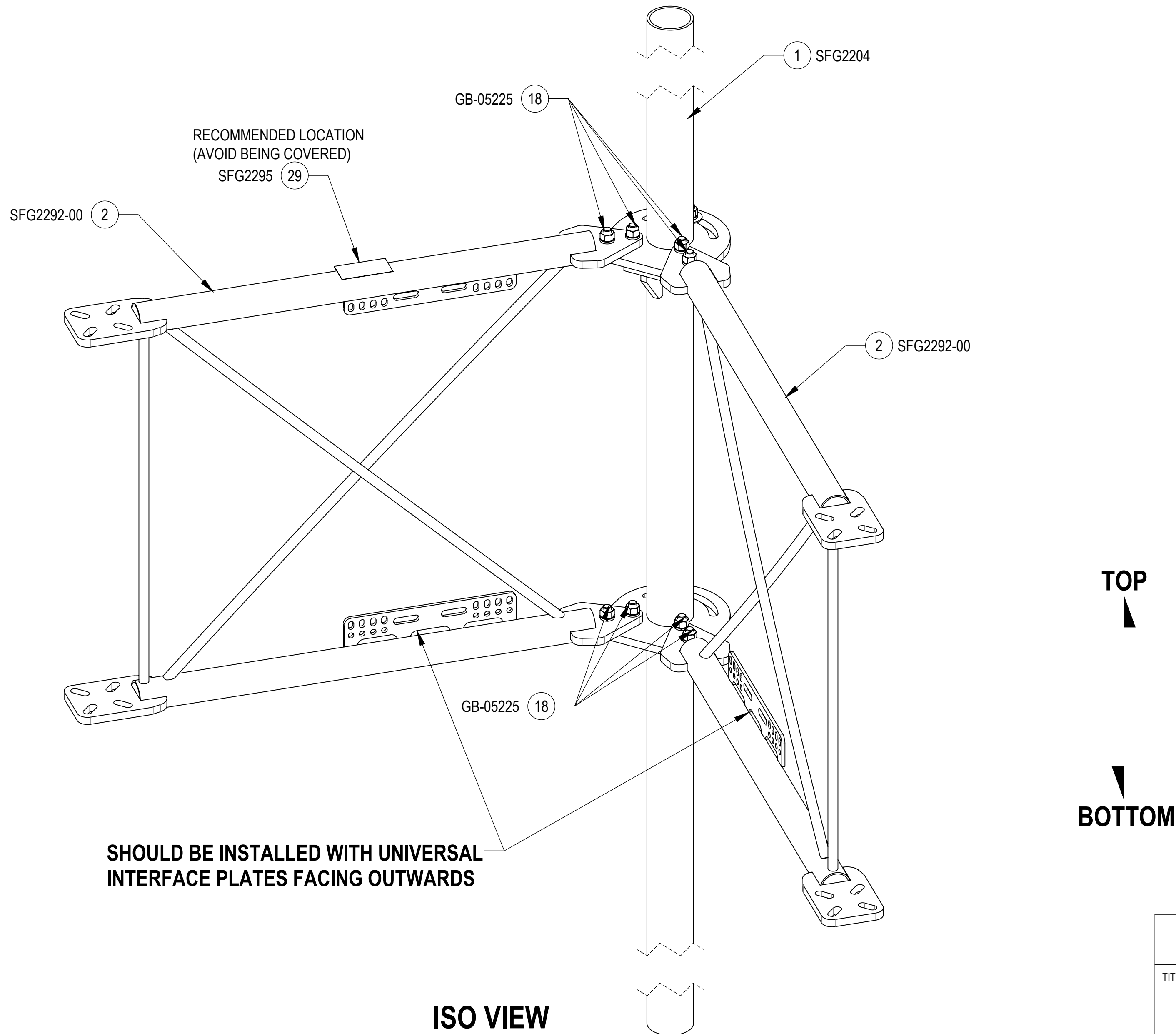
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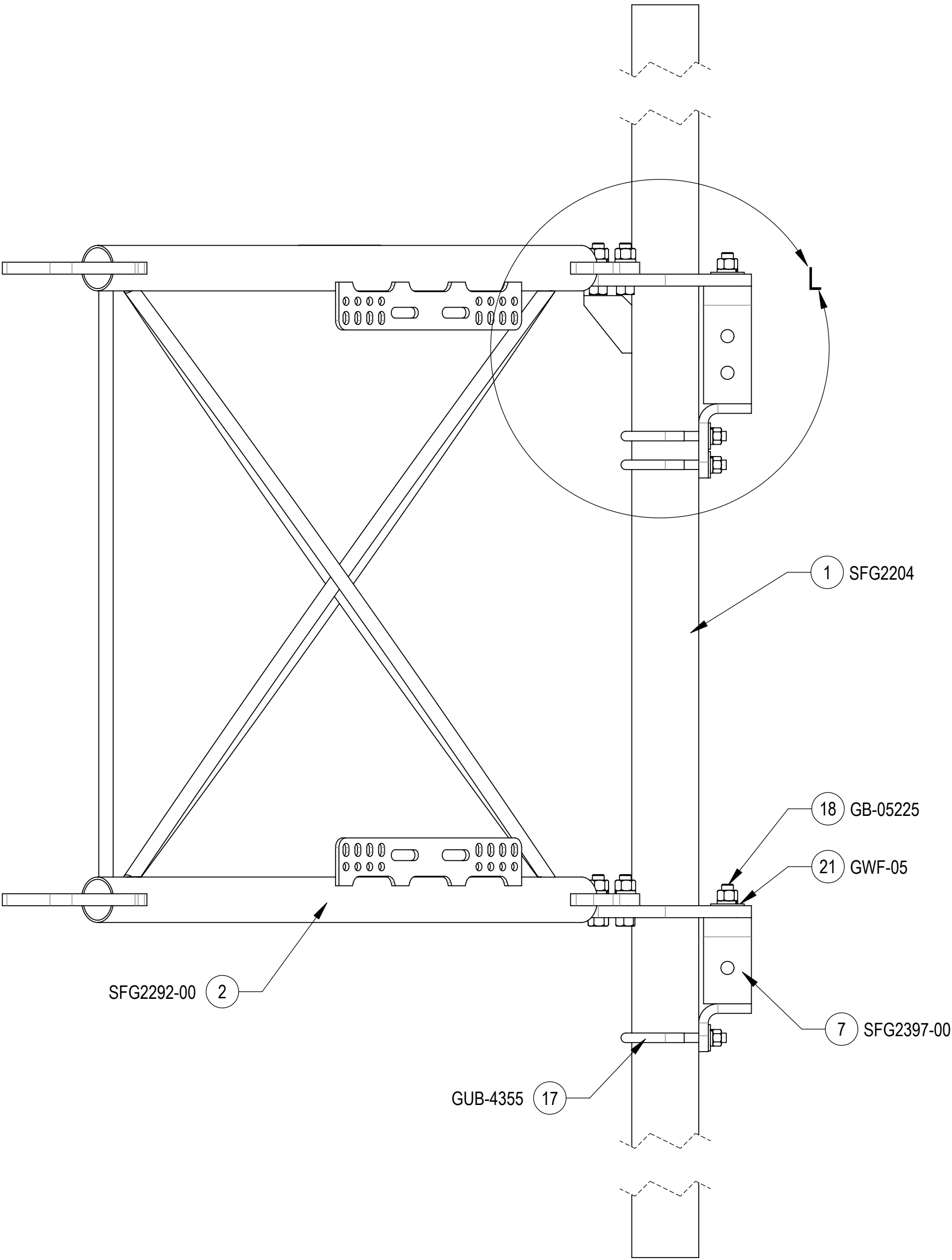
INSTALLATION SEQUENCE - REFERENCE ONLY

STEP 1: ATTACH STANDOFF ARMS (SFG2292-00) TO BACK VERTICAL ARM MOUNT (SFG2204) USING BOLT KITS (GB-05225).
ATTACH LABEL (SFG2295) ON TOP OF STANDOFF ARMS (SFG2292-00). (WIPE GALVANIZED SURFACE WITH ALCOHOL CLEANER
BEFORE APPLYING LABEL)

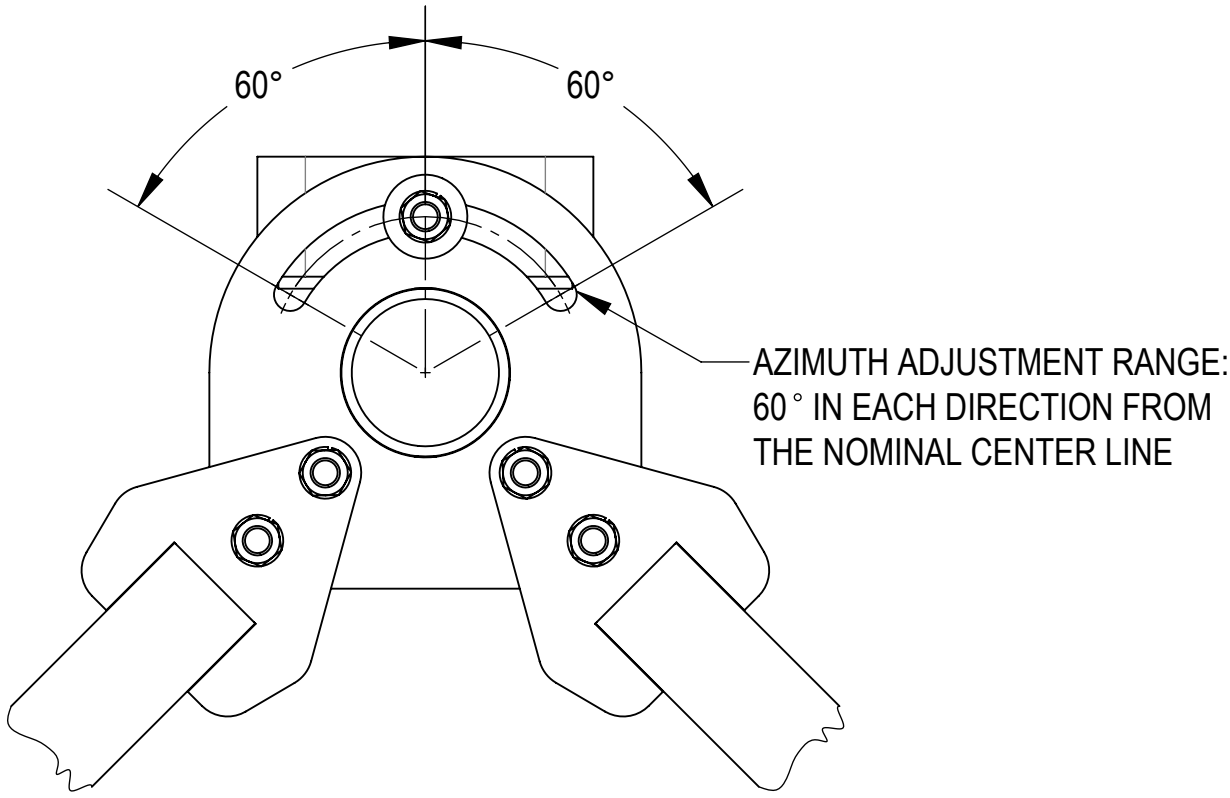


				
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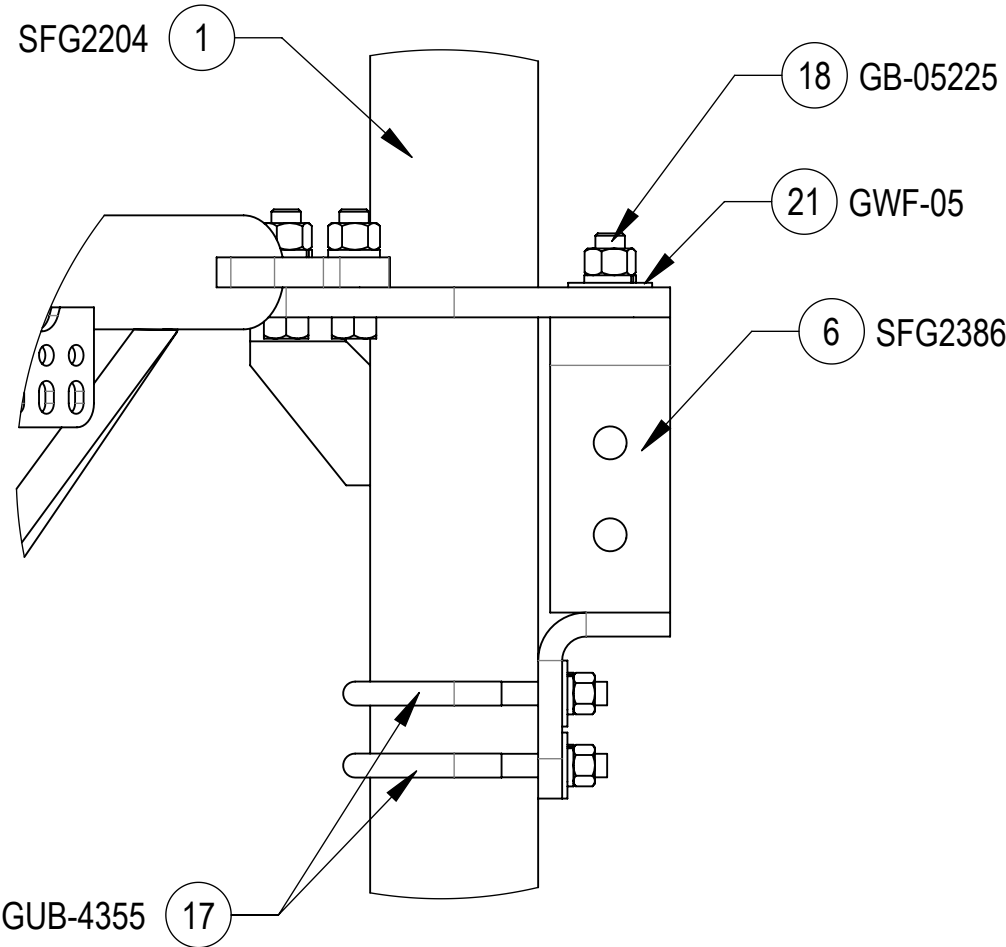
STEP 2: AT TOP, ATTACH AZIMUTH/TAPER BRACKET (SFG2386) TO BACK VERTICAL ARM MOUNT (SFG2204) USING BOLT KIT (GB-05225),
FLAT WASHER (GWF-05) AND U-BOLT KITS (GUB-4355);
AT BOTTOM, ATTACH AZIMUTH/TAPER BRACKET (SFG2397-00) TO BACK VERTICAL ARM MOUNT (SFG2204) USING BOLT KIT (GB-05225),
FLAT WASHER (GWF-05) AND U-BOLT KITS (GUB-4355).



SIDE VIEW



TOP CROP VIEW

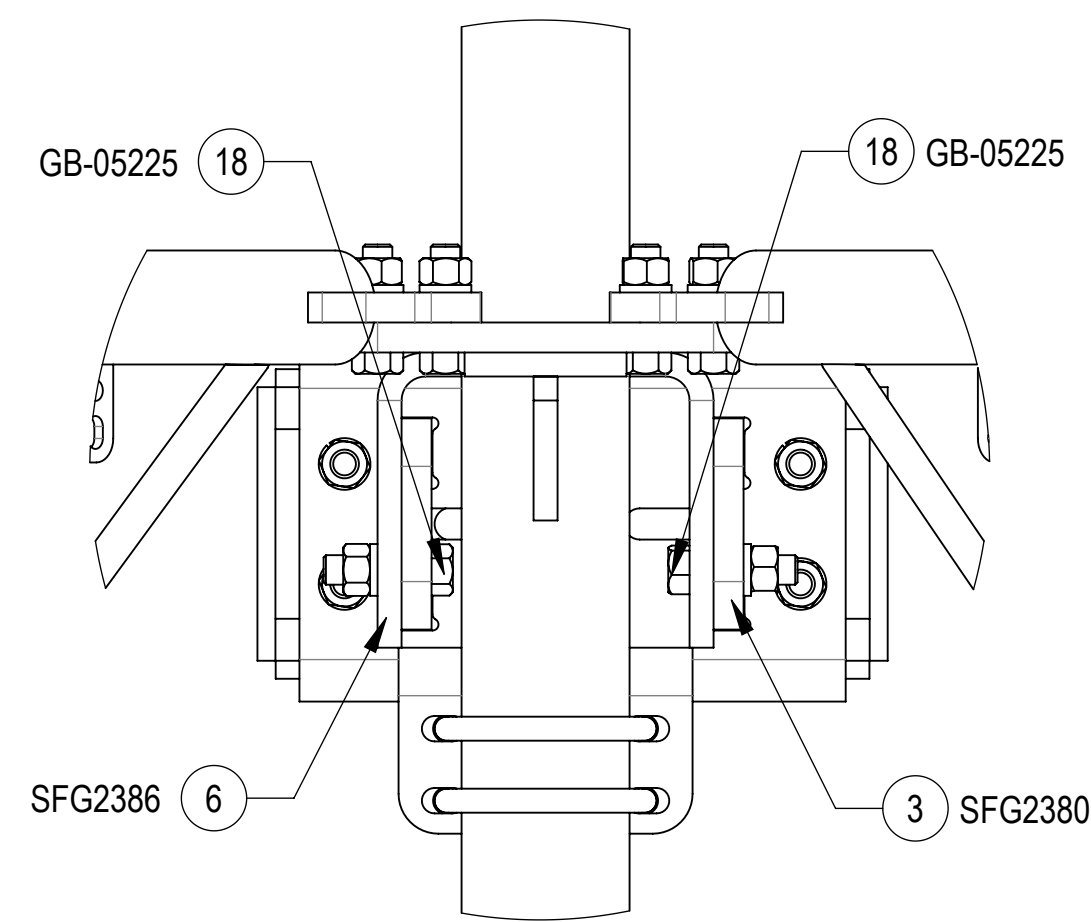


DETAIL L
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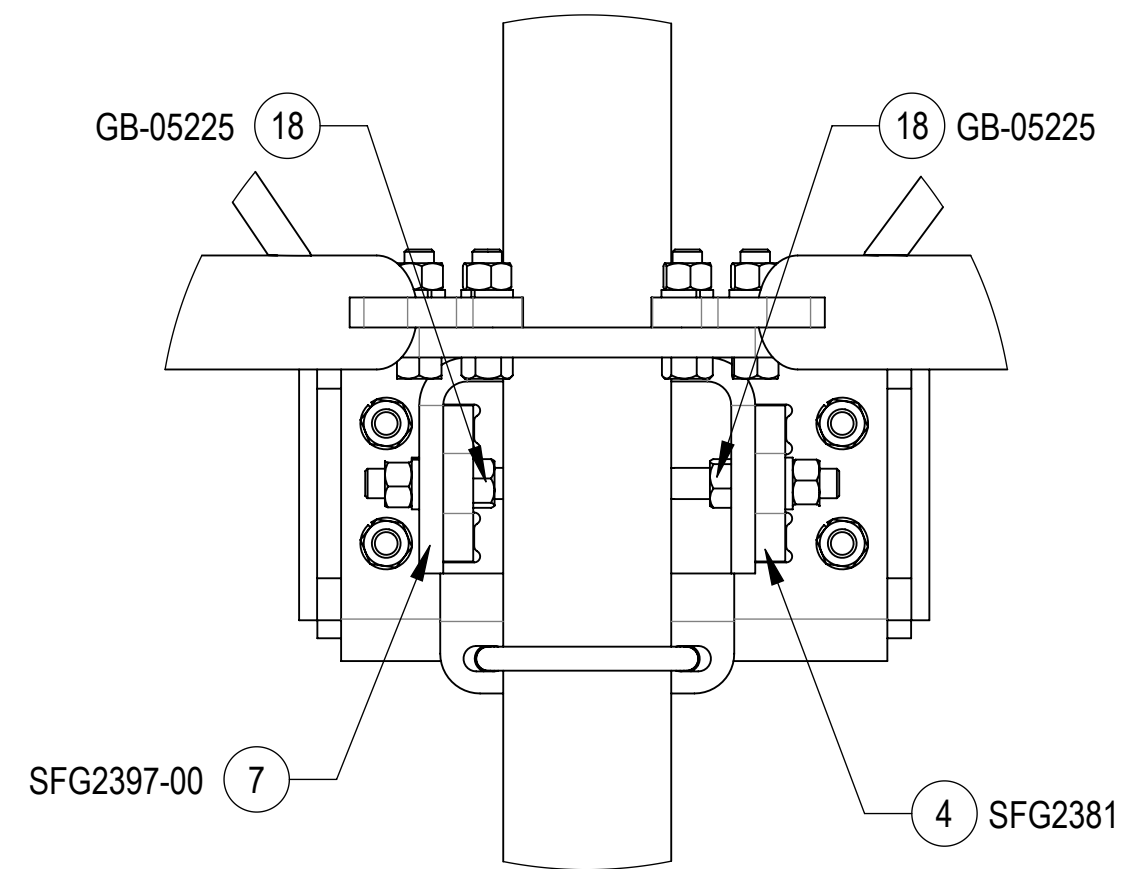
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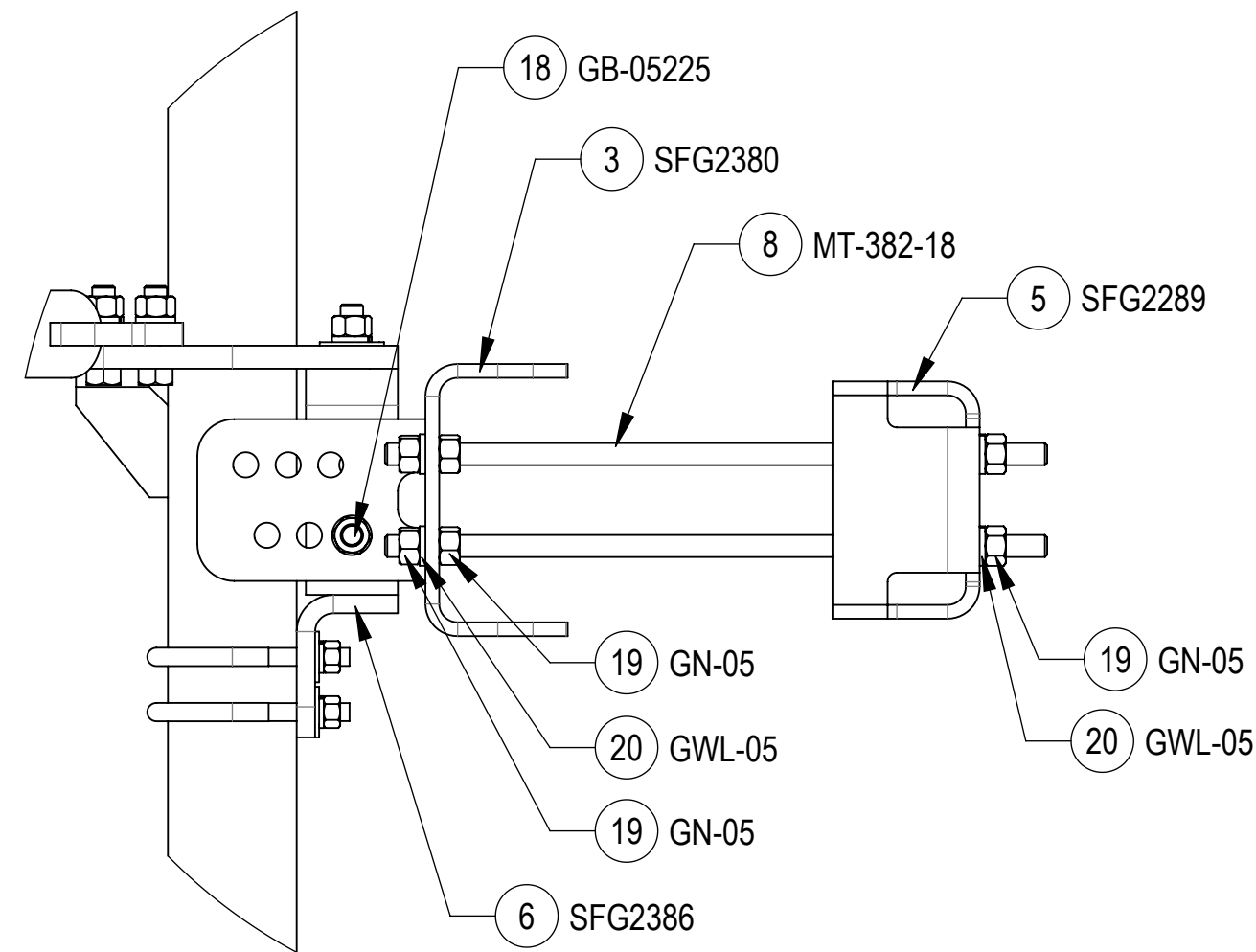
STEP 3: AT TOP, ATTACH TOP TAPER BRACKET (SFG2380) TO AZIMUTH/TAPER BRACKET (SFG2386) USING BOLT KITS (GB-05225);
AT BOTTOM, ATTACH LOWER TOWER LEG BRACKET (SFG2381) TO AZIMUTH/TAPER BRACKET (SFG2397-00) USING BOLT KITS (GB-05225).



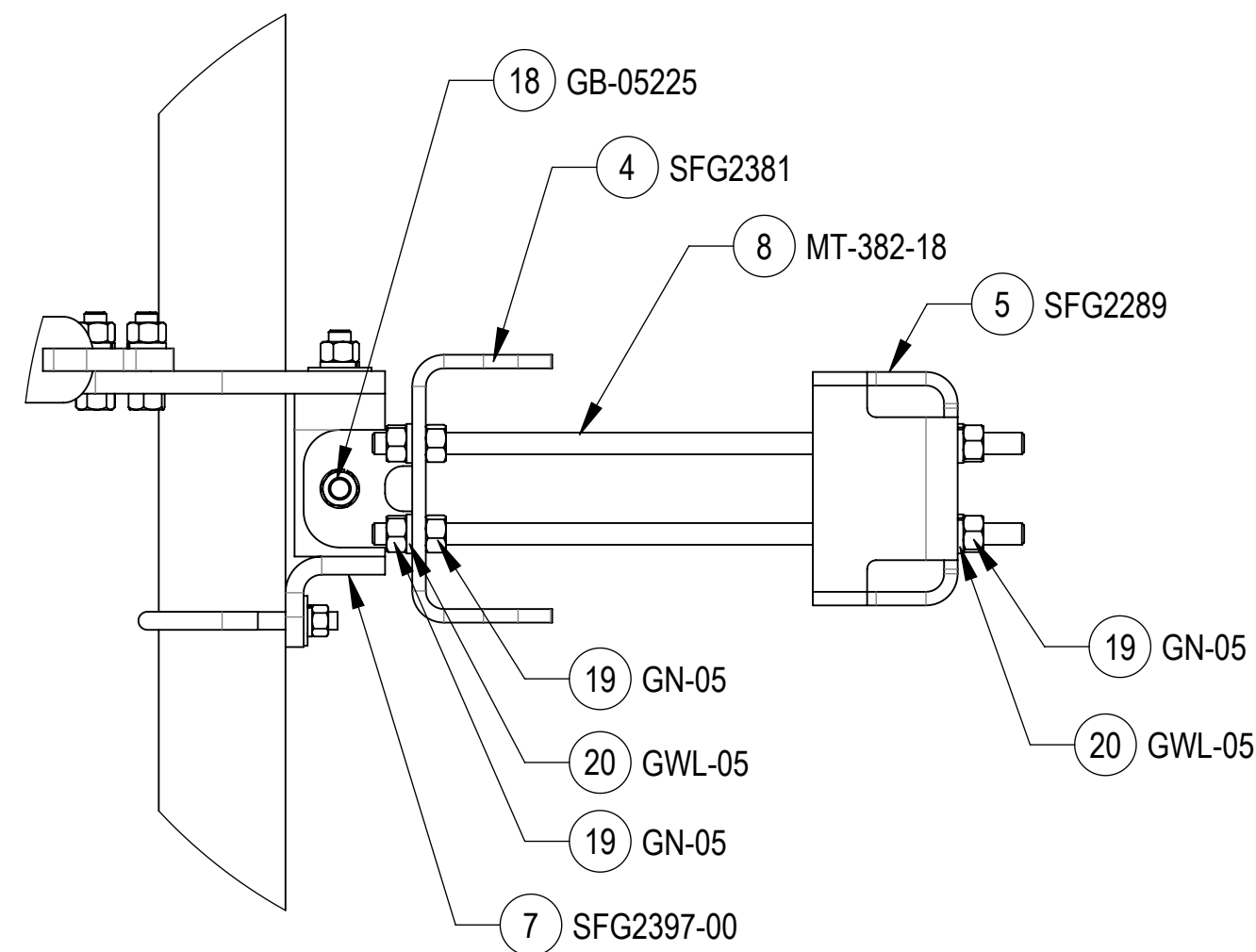
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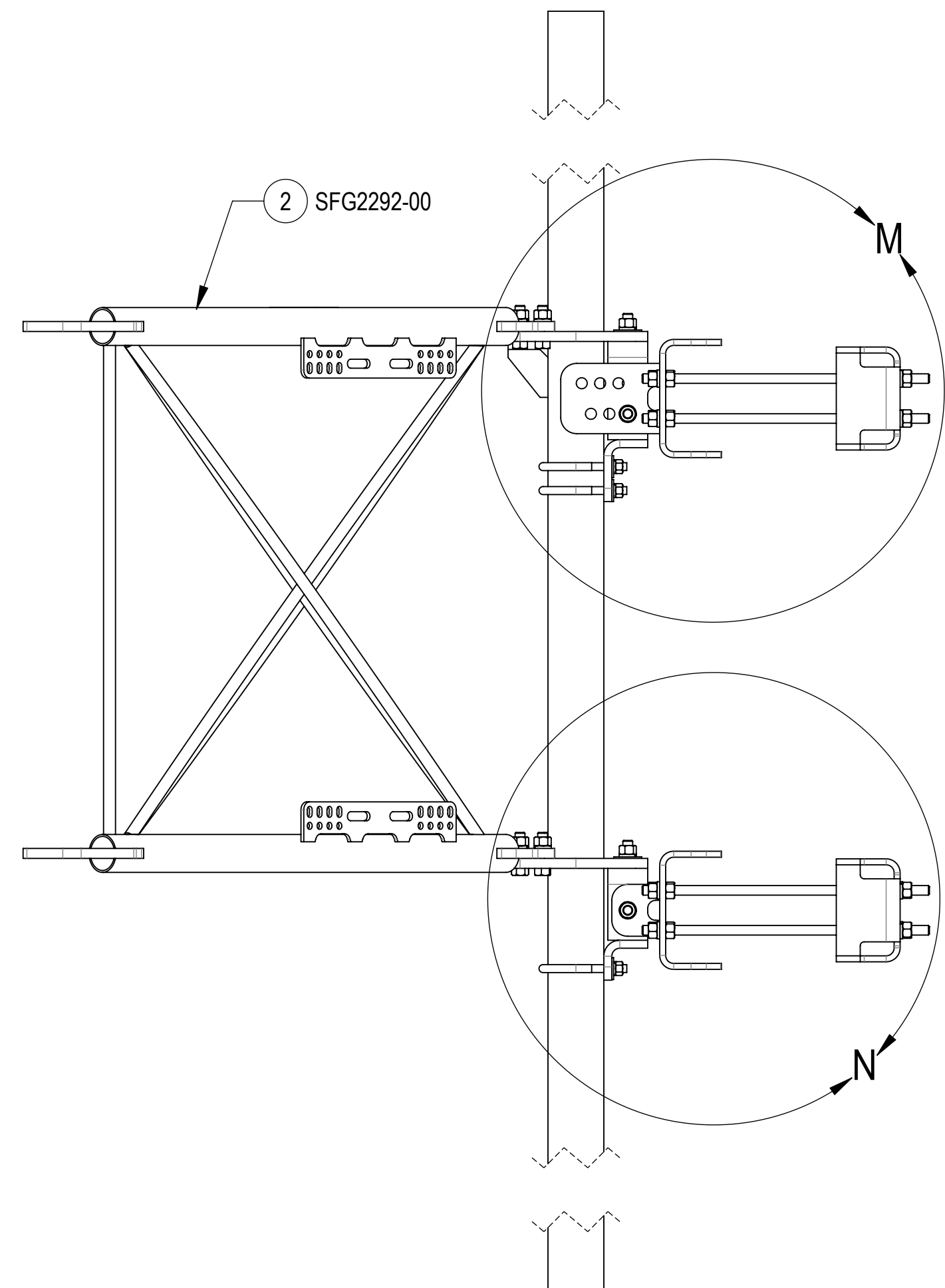
DETAIL ISO BOTTOM ROTATED VIEW
SCALE 1 : 4



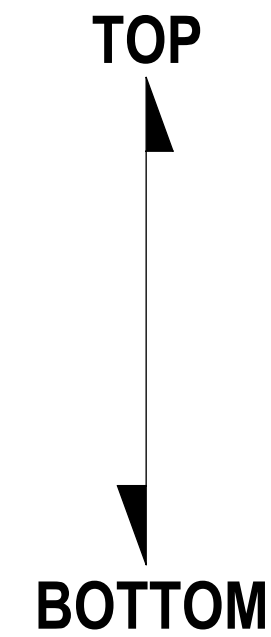
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DETAIL N
SCALE 1 : 5

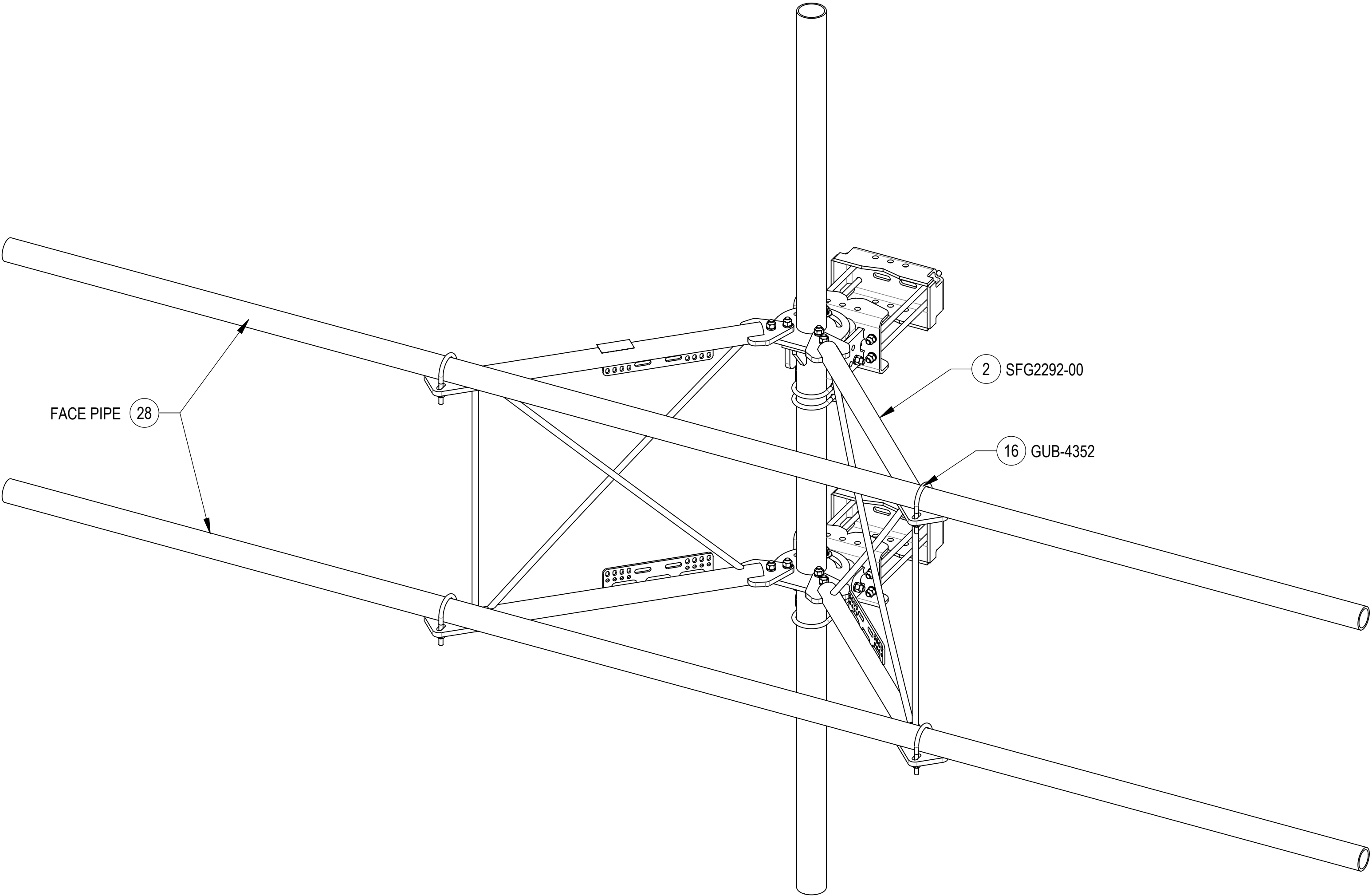


SIDE VIEW



				
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		VERSION 01	STATUS RE	REVISION B
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STEP 4: ATTACH FACE PIPES TO STANDOFF ARMS (SFG2292-00) USING U-BOLTS (GUB-4352)



ISO VIEW



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		VERSION	STATUS		REVISION
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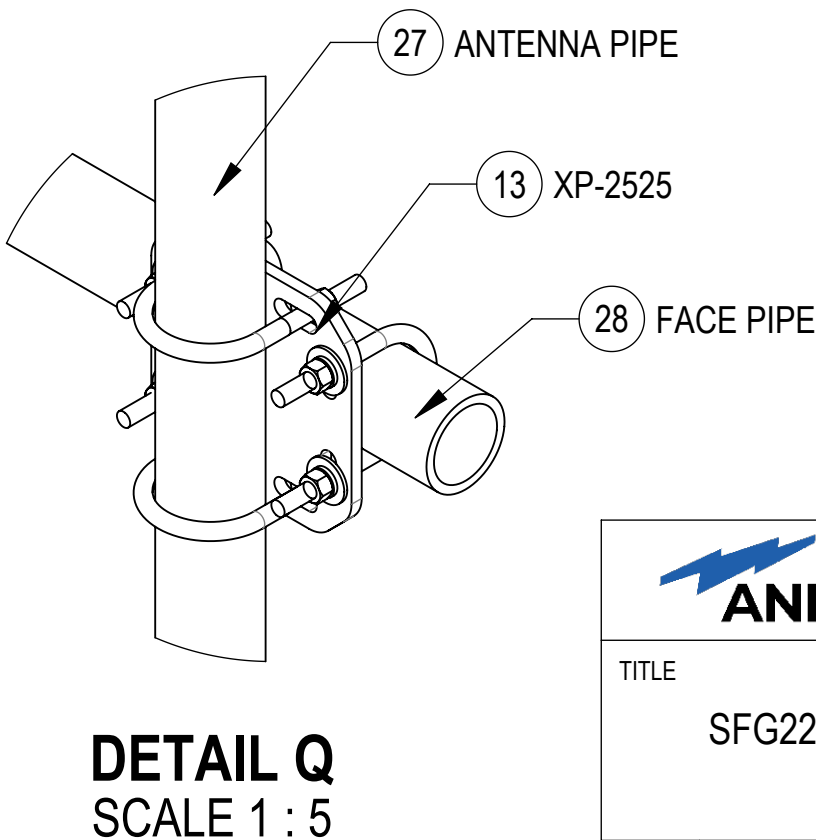
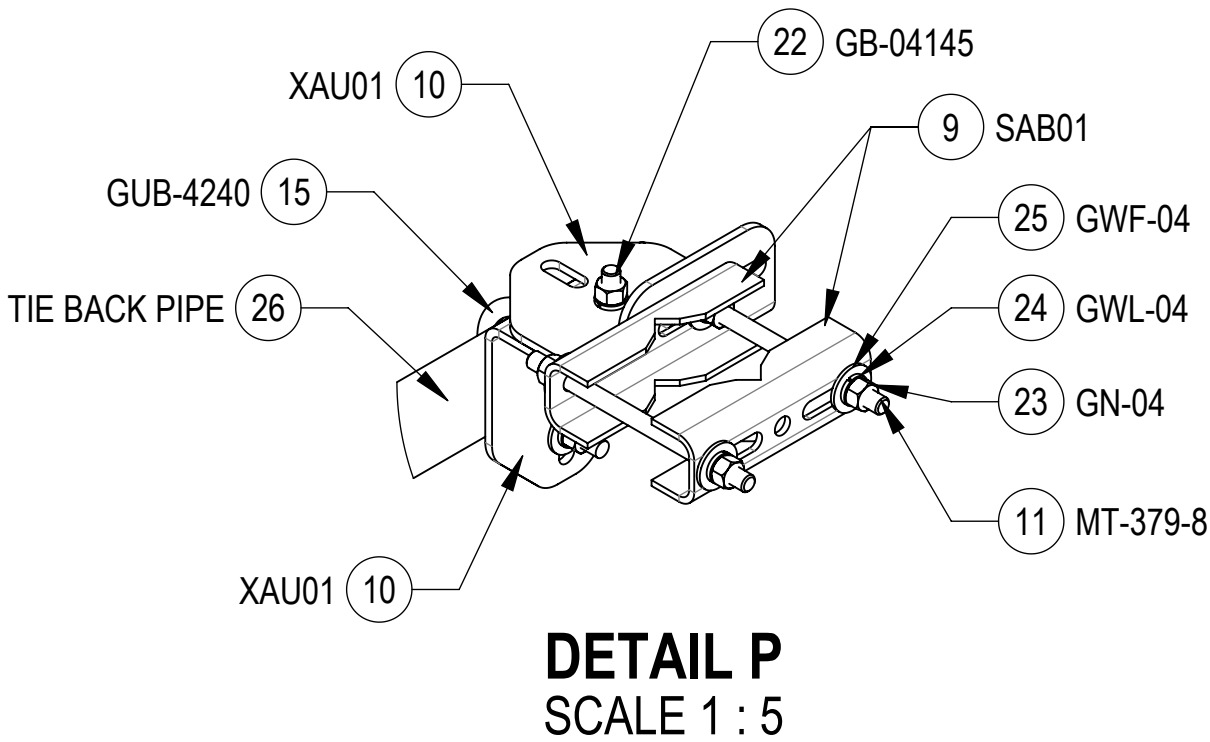
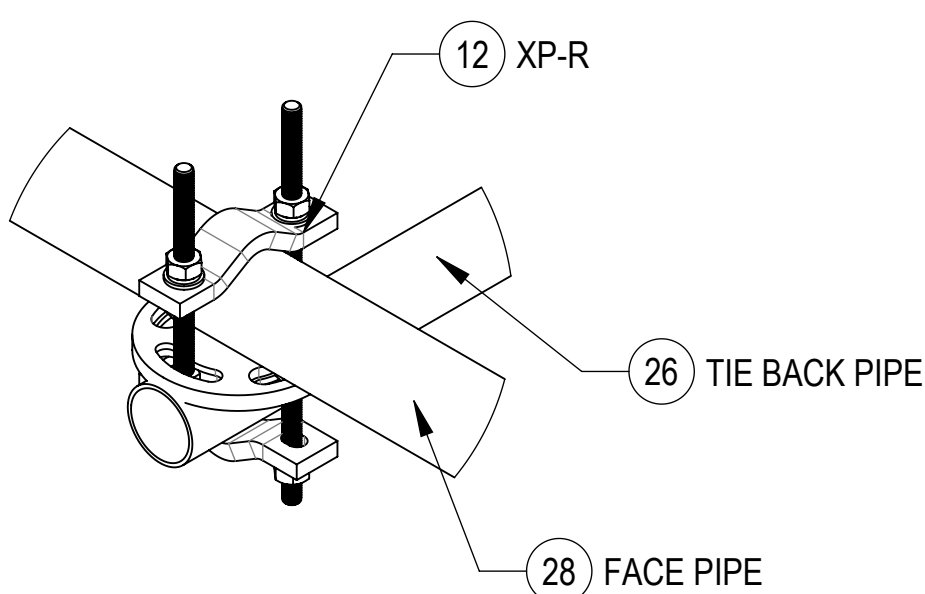
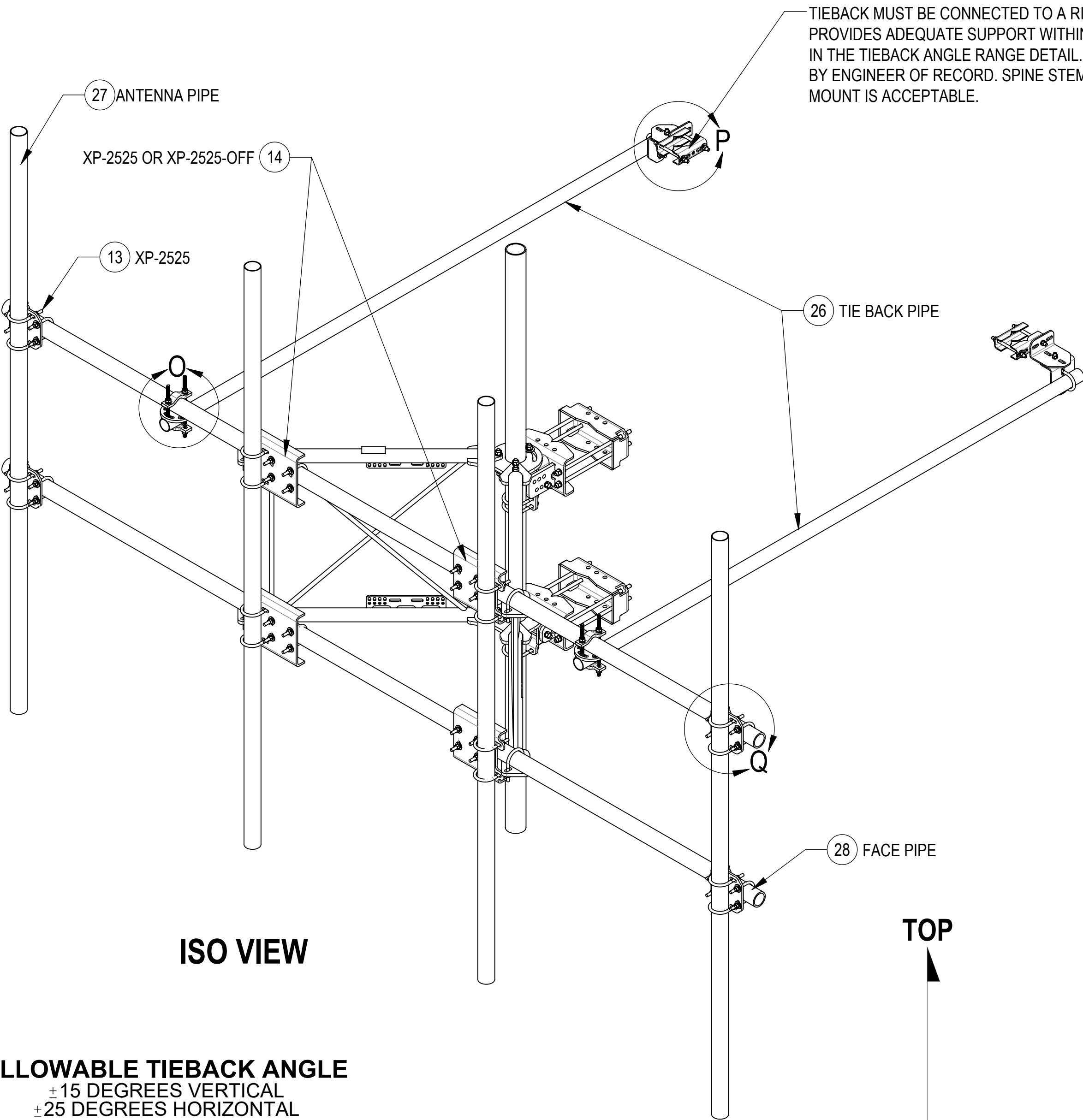
4

3

2

1

STEP 5: ATTACH ANTENNA PIPES TO FACE PIPES USING CROSSOVER PLATE KITS(XP-2525 OR XP-2525-OFF).
ATTACH TIE BACK PIPES TO FACE PIPES USING ROUND CROSSOVER PLATE KITS (XP-R).

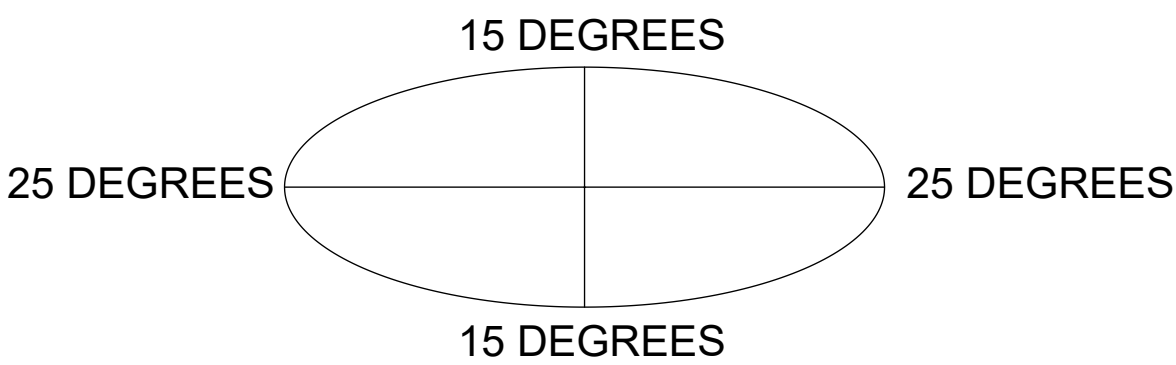


ISO VIEW

TOP

BOTTOM

ALLOWABLE TIEBACK ANGLE
±15 DEGREES VERTICAL
±25 DEGREES HORIZONTAL



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TITLE
SFG22RHDX SECTOR FRAME SERIES

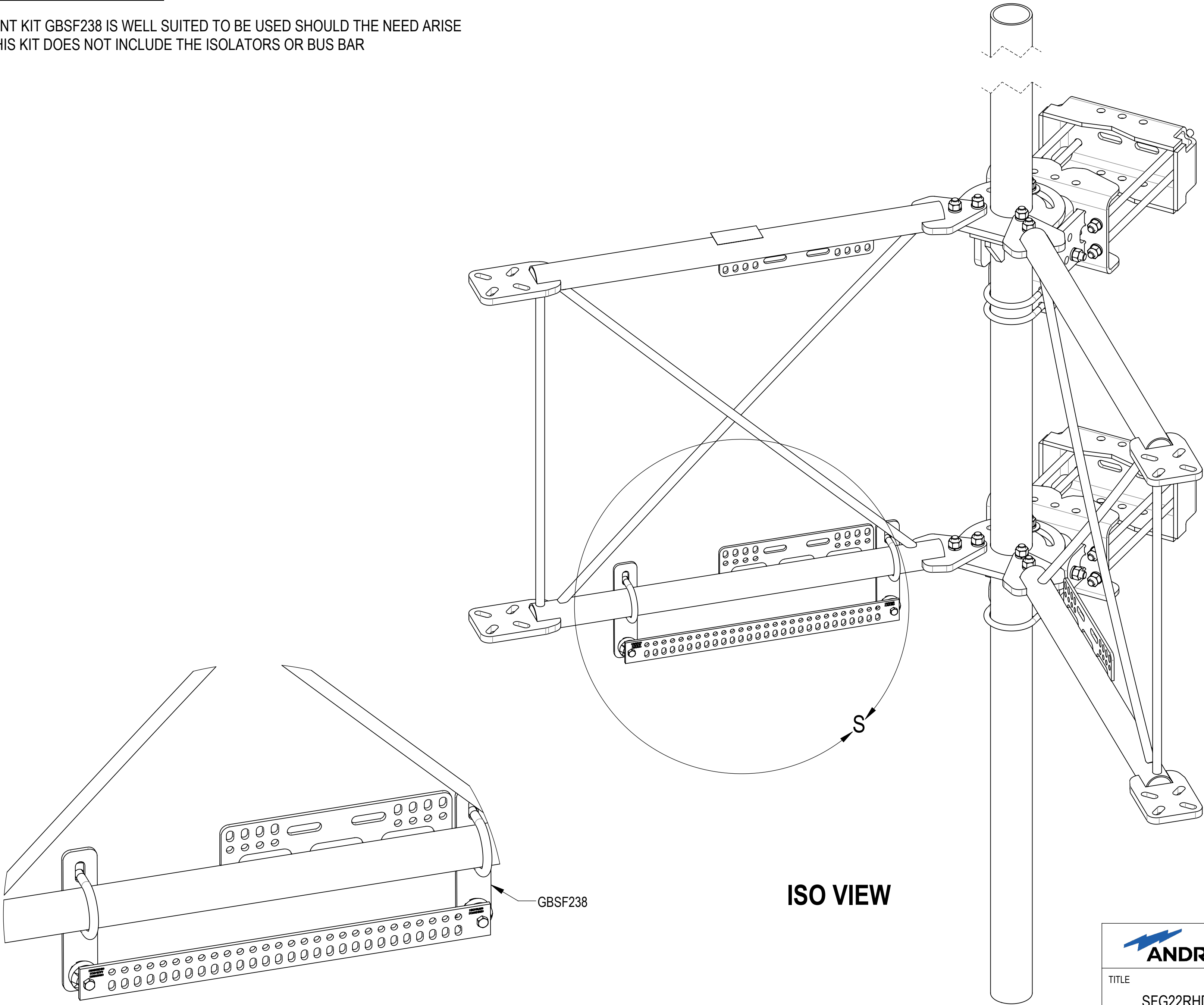
SIZE **C** SCALE **1:12** DOCUMENT NO. **SFG22RHDX**

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VERSION	STATUS	REVISION	
01	RE	B	

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OPTIONAL ACCESSORIES:

BUS BAR MOUNT KIT GBSF238 IS WELL SUITED TO BE USED SHOULD THE NEED ARISE
NOTE THAT THIS KIT DOES NOT INCLUDE THE ISOLATORS OR BUS BAR



ISO VIEW

DETAIL S
SCALE 1 : 4

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TITLE
SFG22RHDX SECTOR FRAME SERIES

SIZE **C** SCALE **1:6** DOCUMENT NO. **SFG22RHDX**



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