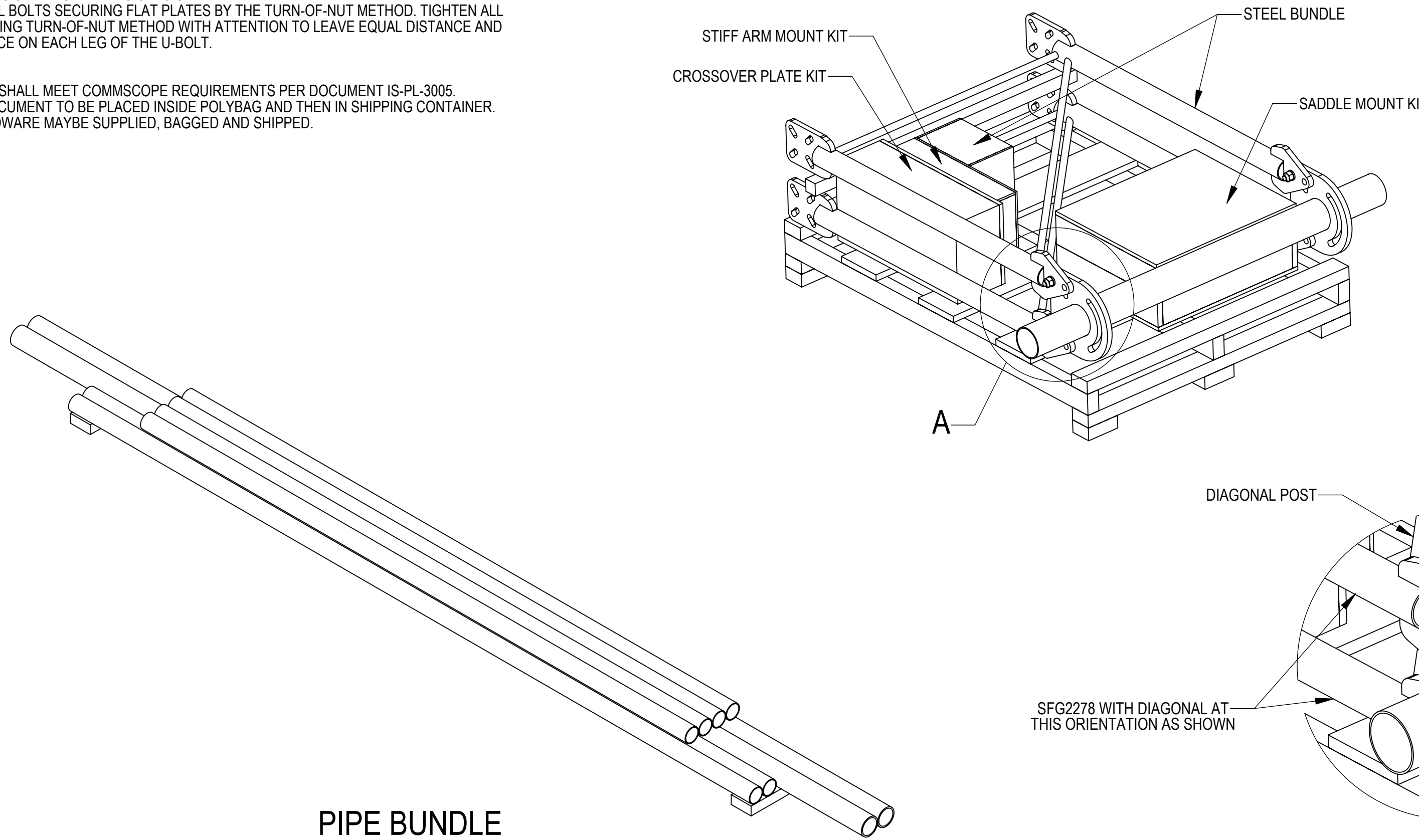


NOTES:

- 1.0 GENERAL NOTES
 - 1.1 ALL METRIC DIMENSIONS ARE IN BRACKETS [X. X]
 - 1.2 MARK PART WITH IDENTIFICATION NUMBER
 - 1.3 FOR PATENT INFO: <https://www.cs-pat.com>
- 2.0 DESIGN NOTES
 - 2.1 ANY HAZARDS OR OBSTRUCTIONS TO THE CLIMBING FACILITY AND SAFETYCLIMB 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.
- 3.0 MANUFACTURING/SPECIAL REQUIREMENTS
 - 3.1 FOR LOADING SEE ENGINEERING SPEC SHEET.
 - 3.2 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 COMMSCOPE REQUIREMENTS PER DOCUMENT IS-PL-3005.
 - 5.2 PRINTED DOCUMENT TO BE PLACED INSIDE POLYBAG AND THEN IN SHIPPING CONTAINER.
 - 5.3 EXTRA HARDWARE MAYBE SUPPLIED, BAGGED AND SHIPPED.

		REVISIONS		
REV.	ECN	DESCRIPTION	BY	DATE
A	8000039299	INITIAL RELEASE	ES1081	07/02/20
B	40146175CMO	SFG22HD SERIES BOM STANDARDIZATION	JL1183	04/06/2022

MOUNT MUST BE INSTALLED WITH DIAGONALS AS SHOWN



DETAIL A
SCALE 1 : 5

PATENT PENDING

TOP LEVEL ZNSK COMPONENTS

PART NO.	DESCRIPTION	SADDLE MOUNT KIT	STIFF ARM MOUNT KIT	CROSSOVER PLATE KIT	STEEL BUNDLE	PIPE BUNDLE
SFG22HD-10-3-126	SECTOR FRAME 10'6" FACE, (3) 126" ANT	SM-U2080HDXG22	SFG22HDX-HK03	XP20256	SFG22HDX-SB01	PB0310A02TEA0210K
SFG22HD-10-3-96	SECTOR FRAME 10'6" FACE, (3) 96" ANT	SM-U2080HDXG22	SFG22HDX-HK03	XP20256	SFG22HDX-SB01	PB02TEA0308A0210K
SFG22HD-10-B	SECTOR FRAME 10'6" FACE - BASE KIT	SM-U2080HDXG22	SFG22HDX-HK03		SFG22HDX-SB01	PB02TEA0210K
SFG22HD-12-4-126	SECTOR FRAME 12'6" FACE, (4) 126" ANT	SM-U2080HDXG22	SFG22HDX-HK03	XP20258	SFG22HDX-SB01	PB0410A02TEA0212K
SFG22HD-12-4-96	SECTOR FRAME 12'6" FACE, (4) 96" ANT	SM-U2080HDXG22	SFG22HDX-HK03	XP20258	SFG22HDX-SB01	PB02TEA0408A0212K
SFG22HD-12-B	SECTOR FRAME 12'6" FACE - BASE KIT	SM-U2080HDXG22	SFG22HDX-HK03		SFG22HDX-SB01	PB02TEA0212K
SFG22HD-14-4-126	SECTOR FRAME 14'6" FACE, (4) 126" ANT	SM-U2080HDXG22	SFG22HDX-HK03	XP20258	SFG22HDX-SB01	PB0410A02TEA0214K
SFG22HD-14-4-96	SECTOR FRAME 14'6" FACE, (4) 96" ANT	SM-U2080HDXG22	SFG22HDX-HK03	XP20258	SFG22HDX-SB01	PB02TEA0408A0214K
SFG22HD-14-B	SECTOR FRAME 14'6" FACE - BASE KIT	SM-U2080HDXG22	SFG22HDX-HK03		SFG22HDX-SB01	PB02TEA0214K

DENSITY	lbs/in ³
MASS	lbs
VOLUME	in ³
SURFACE AREA	in ²
HEIGHT	
LENGTH	
WIDTH	

COMMSCOPE, INC. OF NORTH CAROLINA

TOLERANCES: 1 PLACE .X ± .25, 2 PLACE .XX ± 0.12, 3 PLACE .XXX ± 0.06, ANGLES ± 2°

SAP MATERIAL MASTER: SEE TABLE

FINISH: GALV A123; MATERIAL: SEE SEPARATE BILLS OF MATERIAL

NAME	DATE	TITLE
CE RJC	12/13/18	SFG22HD SECTOR FRAME SERIES
RW JL1183	04/26/2022	
AD BCROSS	05/03/2022	
RE JL1183	05/12/2022	

SCALE: 1:10; DOCUMENT NO.: SFG22HD

SIZE	Auth Group	INSL	MODEL	DRAWING			SHEET		
C			VERSION	STATUS	REVISION	VERSION	STATUS	REVISION	1 OF 9
			00	RE	A	07	RE	B	

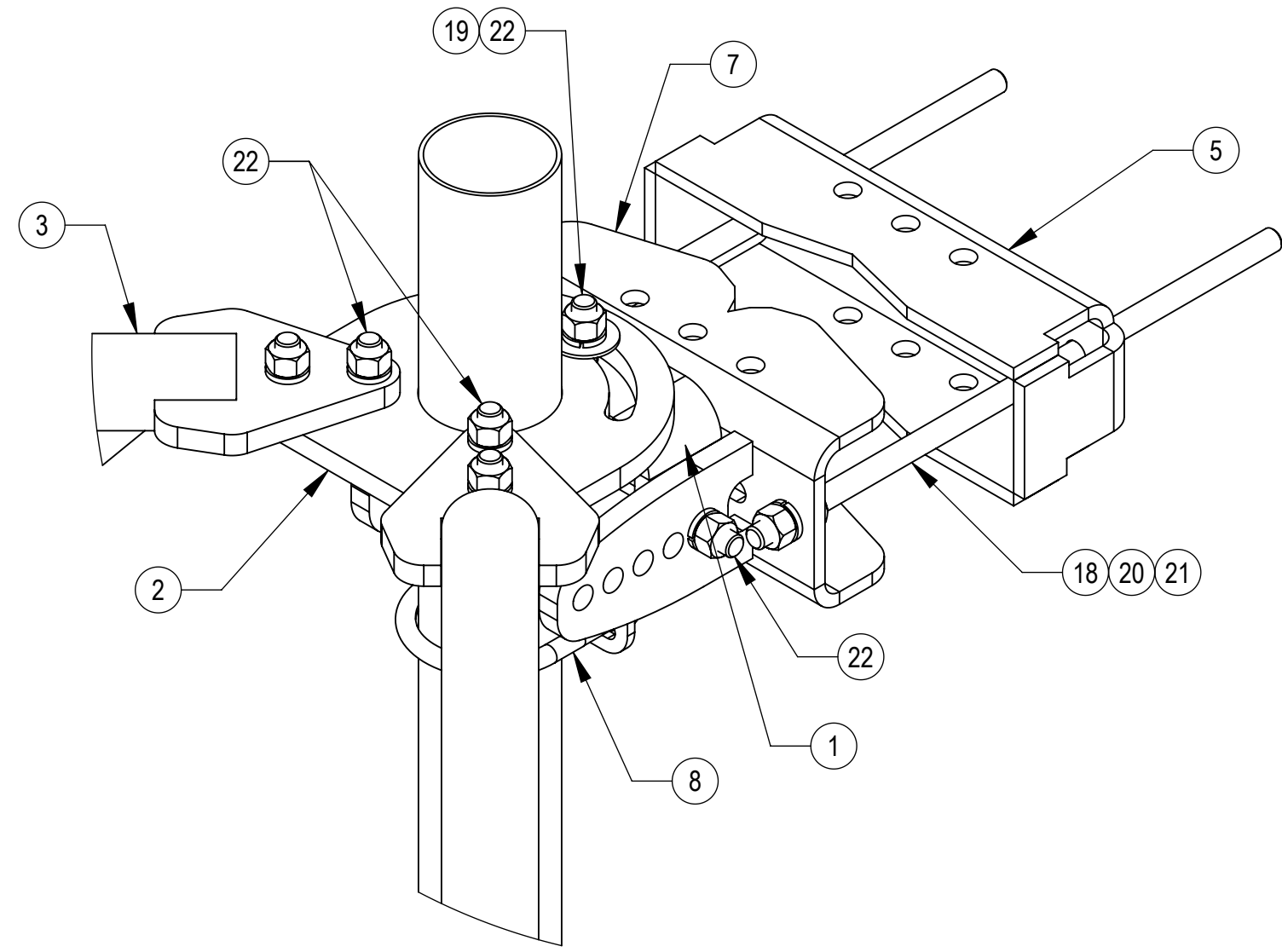
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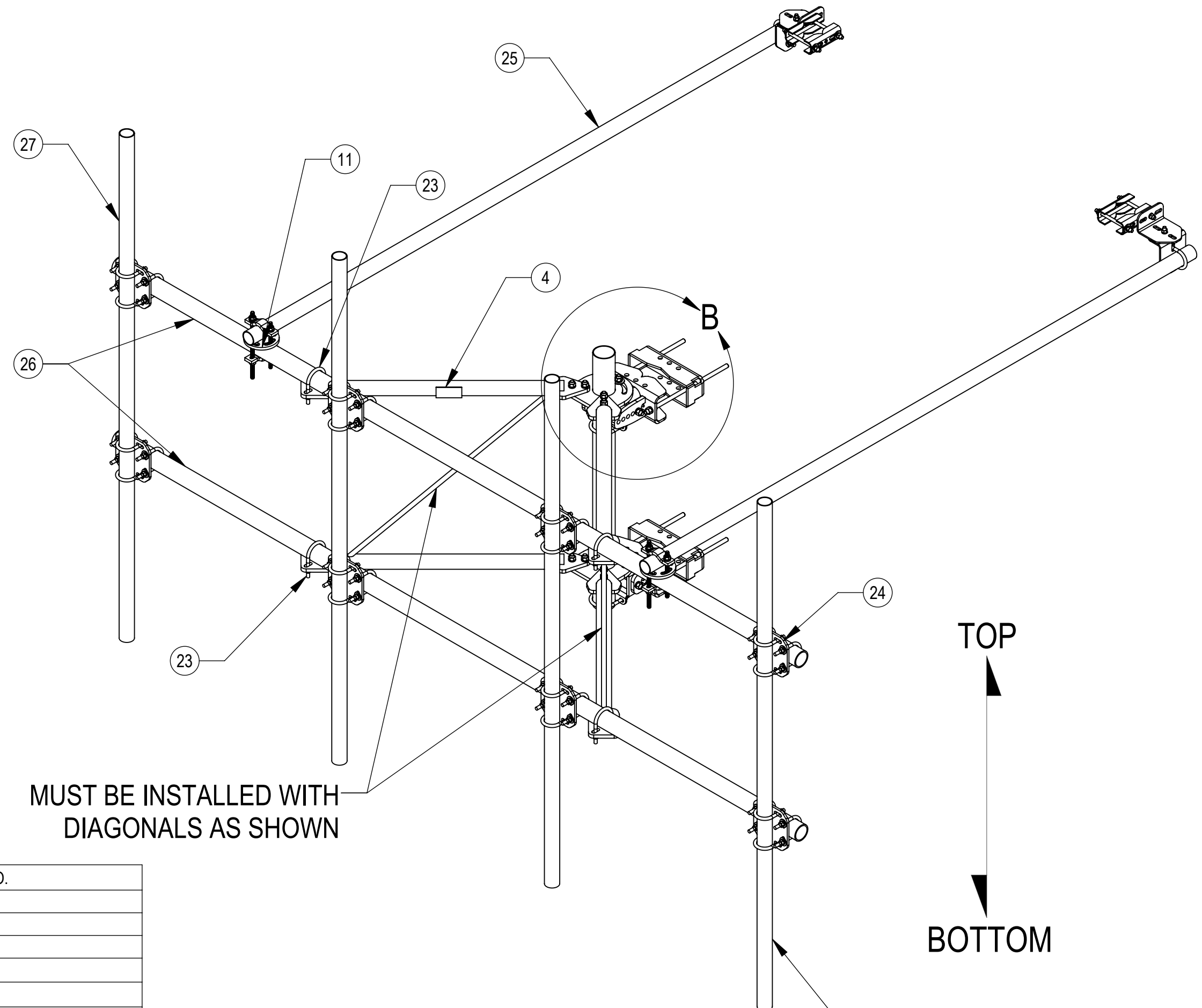
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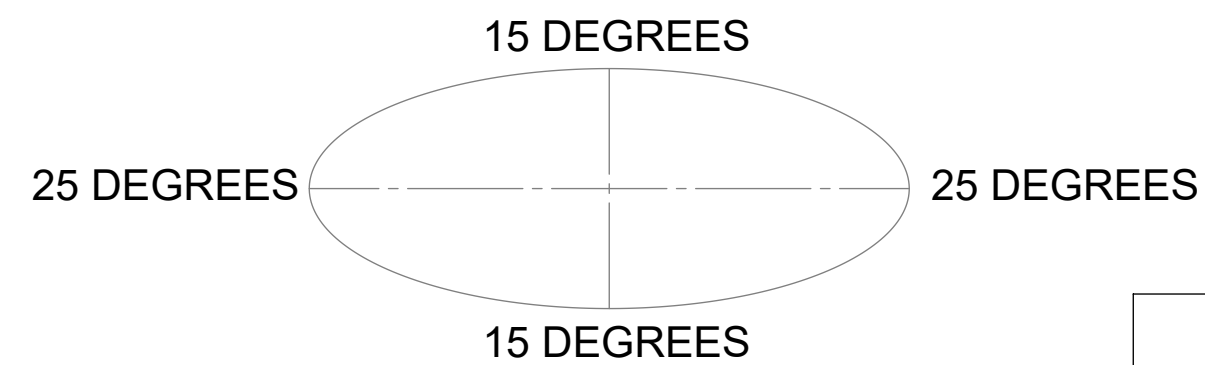
DETAIL B
SCALE 1 : 4

SFG22HD-12-4-96 SHOWN FOR REFERENCE
(NOT ALL CONFIGURATIONS INCLUDE ALL ITEMS SEE NOTES IN TABLE)



**MUST BE INSTALLED WITH
DIAGONALS AS SHOWN**

ALLOWABLE TIEBACK ANGLE
+15 DEGREES VERTICAL
±25 DEGREES HORIZONTAL



BOM IS FOR REFERENCE ONLY. SEPARATELY SUPPLIED SAP BOM CONTROLS CONTENT

ITEM	PART NO.	DESCRIPTION	QTY.	WEIGHT	NOTE NO.
1	SFG2237	WELDMENT, AZIMUTH/TAPER BRACKET	2	6.46 LBS	
2	SFG2270	BACK VERTICAL ARM MOUNT	1	36.96 LBS	
3	SFG2278	ARM, STANDOFF - SFG22	2	40.92 LBS	
4	SFG2250	LABEL, SFG22	1	0.03 LBS	
5	SFG2284	BRACKET, FRONT TOWER LEG, BARE	2	14.69 LBS	
6	SFG2343	WELDMENT, LOWER, TOWER LEG BRACKET	1	14.36 LBS	
7	SFG2345	WELDMENT, TOP TAPER BRACKET	1	18.27 LBS	
8	GUB-4355	1/2" X 3-5/8" X 5" GALV U-BOLT	2	0.71 LBS	
9	XAU01	ANGLE, CROSSOVER, 1.9-3.5" X 1.9-3.5" OD	4	2.98 LBS	
10	GUB-4240	1/2" X 2-1/2" X 4" GALV U-BOLT	2	0.56 LBS	
11	XP-R	CROSSOVER PLATE, ROUND, UP TO 3.5" OD	2	6.20 LBS	
12	SAB01	FORMED CLAMP	4	1.35 LBS	
13	MT-379-8	1/2" X 8" GALV THREADED ROD	4	0.45 LBS	
14	GWF-04	1/2" GALV FLAT WASHER	8	0.04 LBS	
15	GWL-04	1/2" GALV LOCK WASHER	10	0.01 LBS	
16	GN-04	1/2" GALV HEX NUT	10	0.04 LBS	
17	GB-04145	1/2" X 1-1/2" GALV BOLT KIT	2	0.13 LBS	
18	MT-382-18	5/8" X 18" GALV THREADED ROD	4	1.55 LBS	
19	GWF-05	5/8" GALV FLAT WASHER, 1.7OD	2	0.06 LBS	
20	GWL-05	5/8" GALV LOCK WASHER	8	0.03 LBS	
21	GN-05	5/8" GALV HEX NUT	12	0.08 LBS	
22	GB-05225	5/8" X 2-1/4" GALV BOLT KIT	14	0.28 LBS	
23	GUB-4352	1/2" X 3" X 5-1/4" GALV U-BOLT	4	0.71 LBS	
24	XP-2025	CROSSOVER PLATE KIT, 2-3/8 OD X 2-7/8 OD	8	7.77 LBS	QTY SEE SEPARATE BILLS OF MATERIAL
25	MT-651-120	2.375" OD X .120" WALL X 120" PIPE	2	29.07 LBS	PART NO. SEE SEPARATE BILLS OF MATERIAL
26	MT-546-150	2-7/8" OD X 150" GALV PIPE	2	72.67 LBS	PART NO. SEE SEPARATE BILLS OF MATERIAL
27	MT-651-96	Ø 2.375" OD X .120" WALL X 96" PIPE	4	23.05 LBS	PART NO. SEE SEPARATE BILLS OF MATERIAL

PATENT PENDING

COMMSCOPE, INC. OF NORTH CAROLINA				
TITLE SFG22HD SECTOR FRAME SERIES				
SIZE C	SCALE 1:14	DOCUMENT NO. SFG22HD		
DRAWING		VERSION	STATUS	REVISION
		07	RE	B
				SHEET 2 OF 9

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NOTES:

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.

ALLOWABLE TIEBACK ANGLE

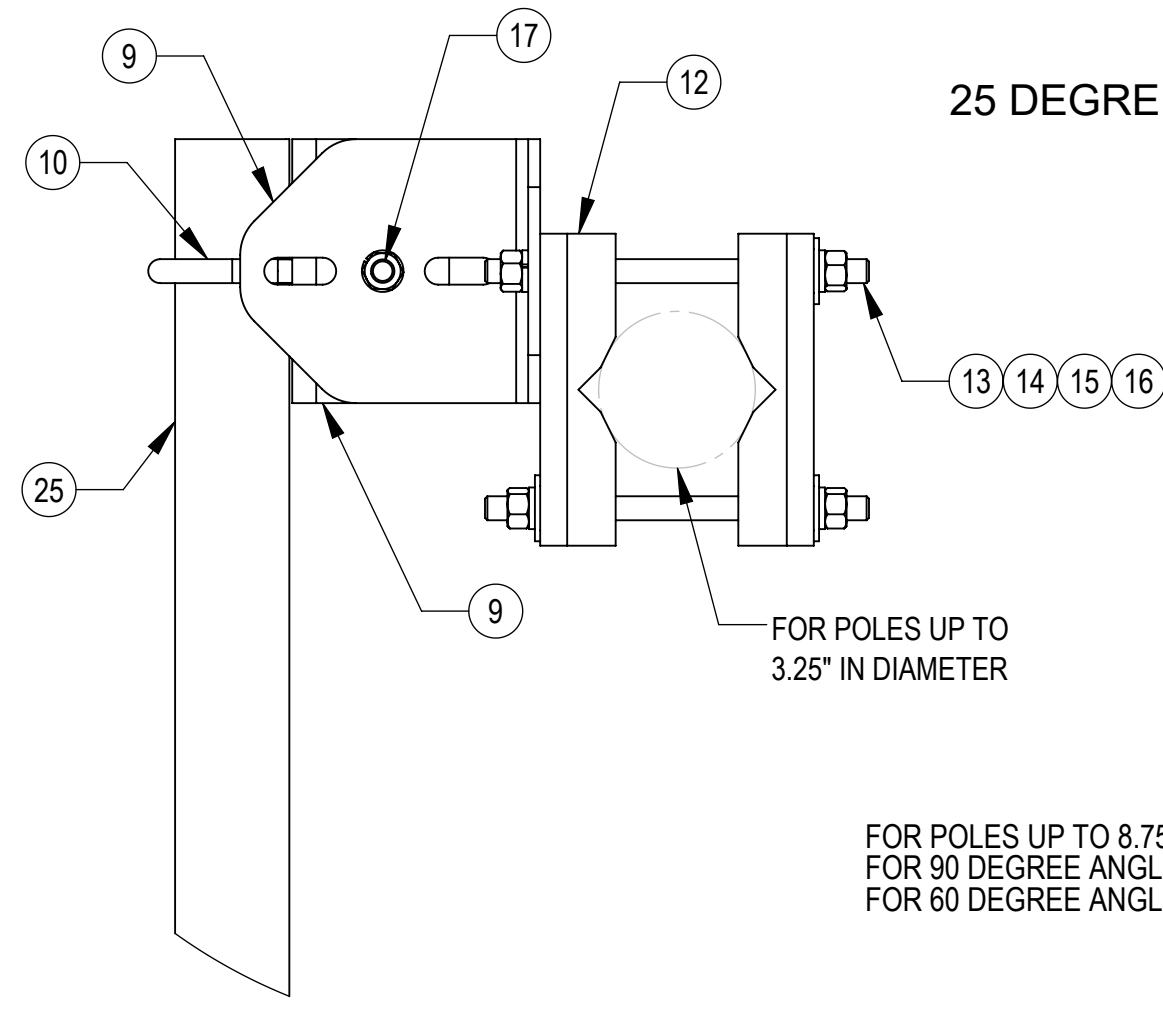
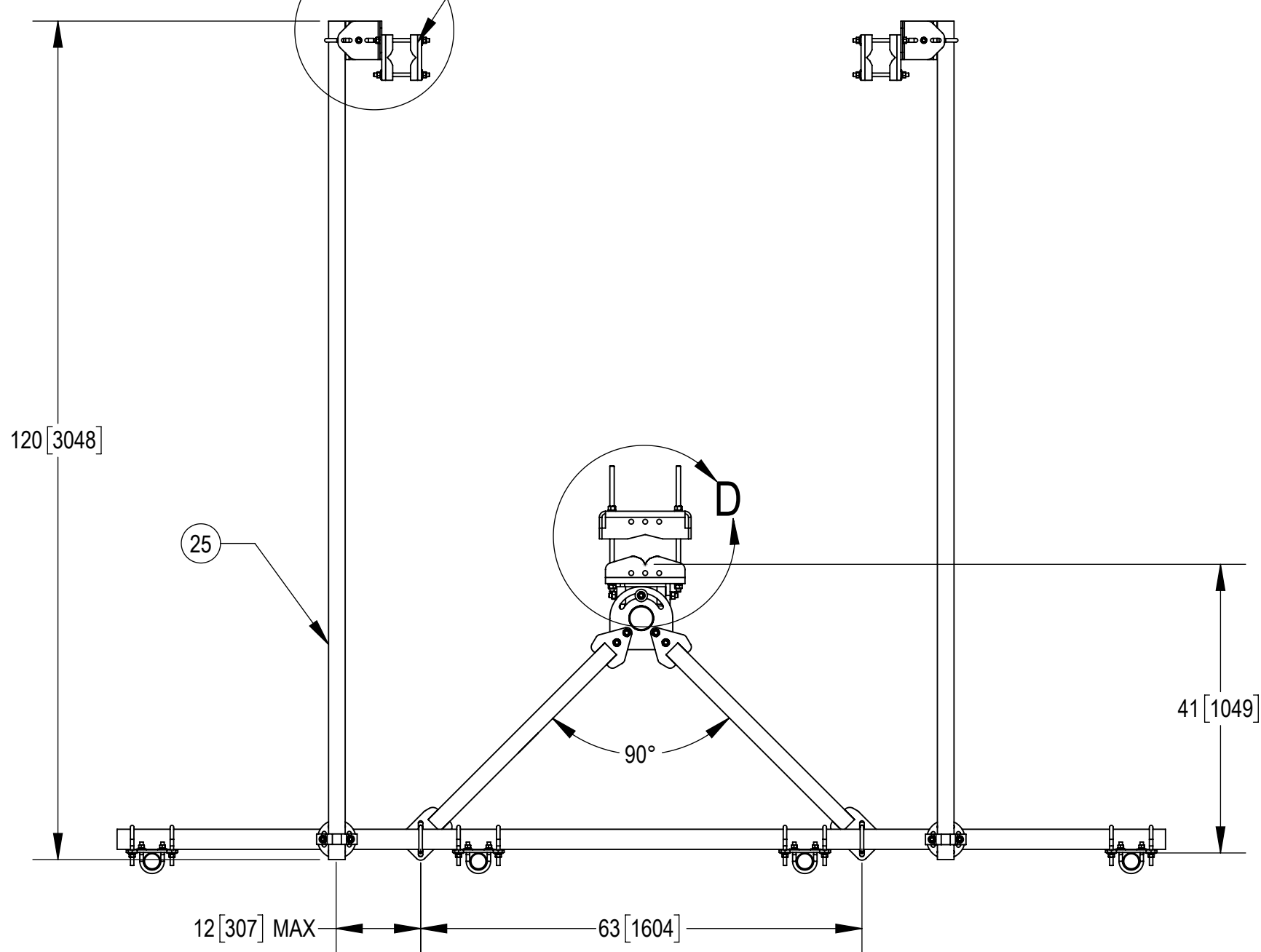
±15 DEGREES VERTICAL
±25 DEGREES HORIZONTAL

15 DEGREES

25 DEGREES

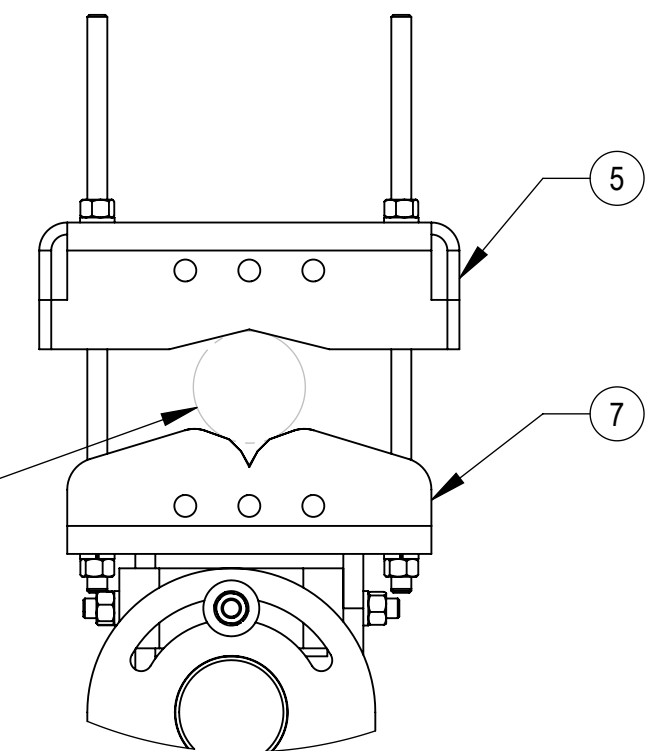
25 DEGREES

15 DEGREES



DETAIL C
SCALE 1 : 4

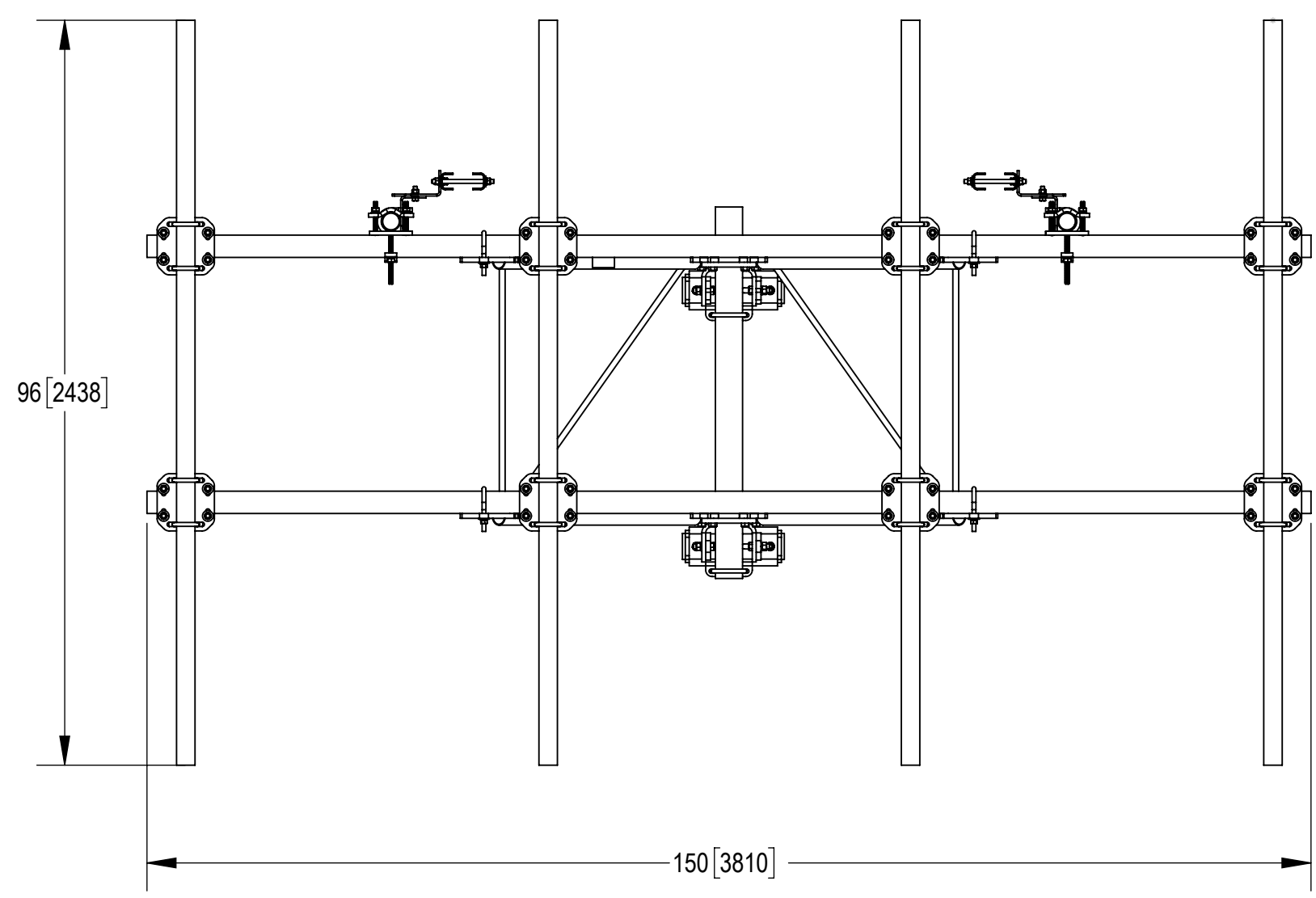
FOR POLES UP TO 8.75" IN DIAMETER
FOR 90 DEGREE ANGLES UP TO 6.0"
FOR 60 DEGREE ANGLES UP TO 7.5"



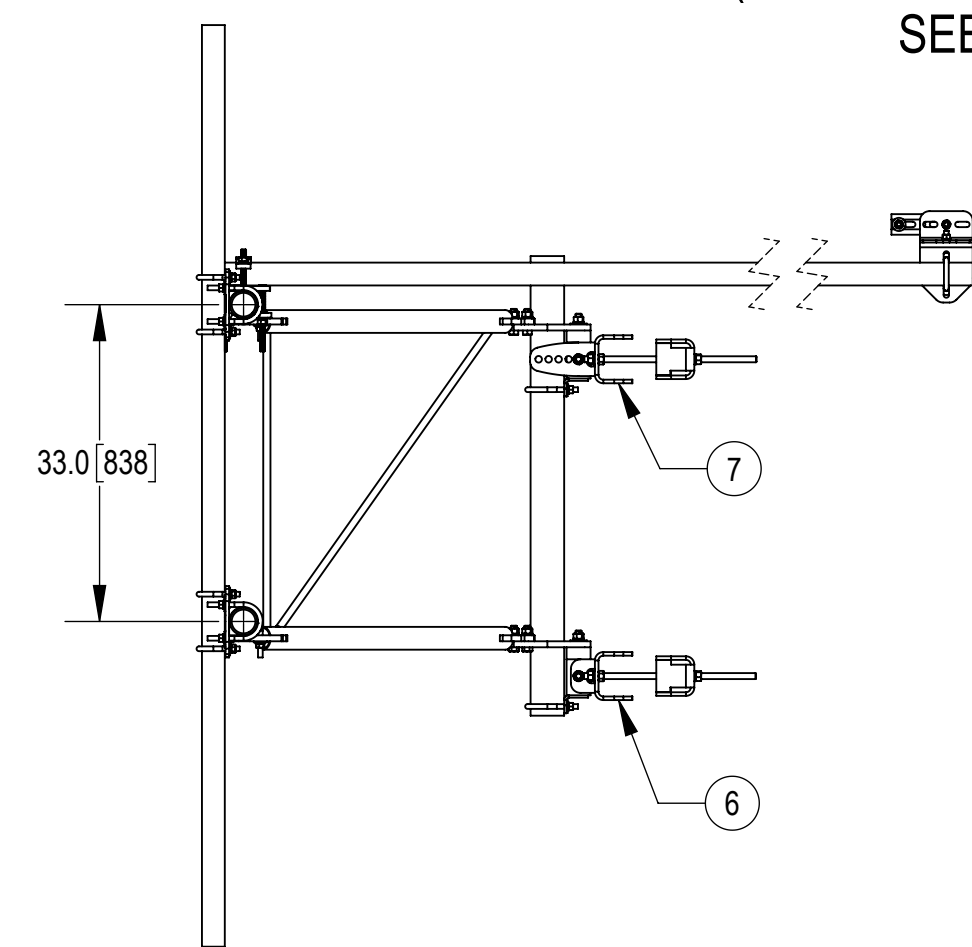
DETAIL D
SCALE 1 : 6

SFG22HD12-4-96 SHOWN FOR REFERENCE

(NOT ALL CONFIGURATIONS INCLUDE ALL ITEMS
SEE NOTES IN TABLE ON PAGE 2)



TOP
↓
BOTTOM



PATENT PENDING

COMMSCOPE, INC. OF NORTH CAROLINA

TITLE
SFG22HD SECTOR FRAME SERIES

SIZE C	SCALE 1:20	DOCUMENT NO. SFG22HD		
		DRAWING		SHEET
		VERSION	STATUS	REVISION
		07	RE	B
				3 OF 9

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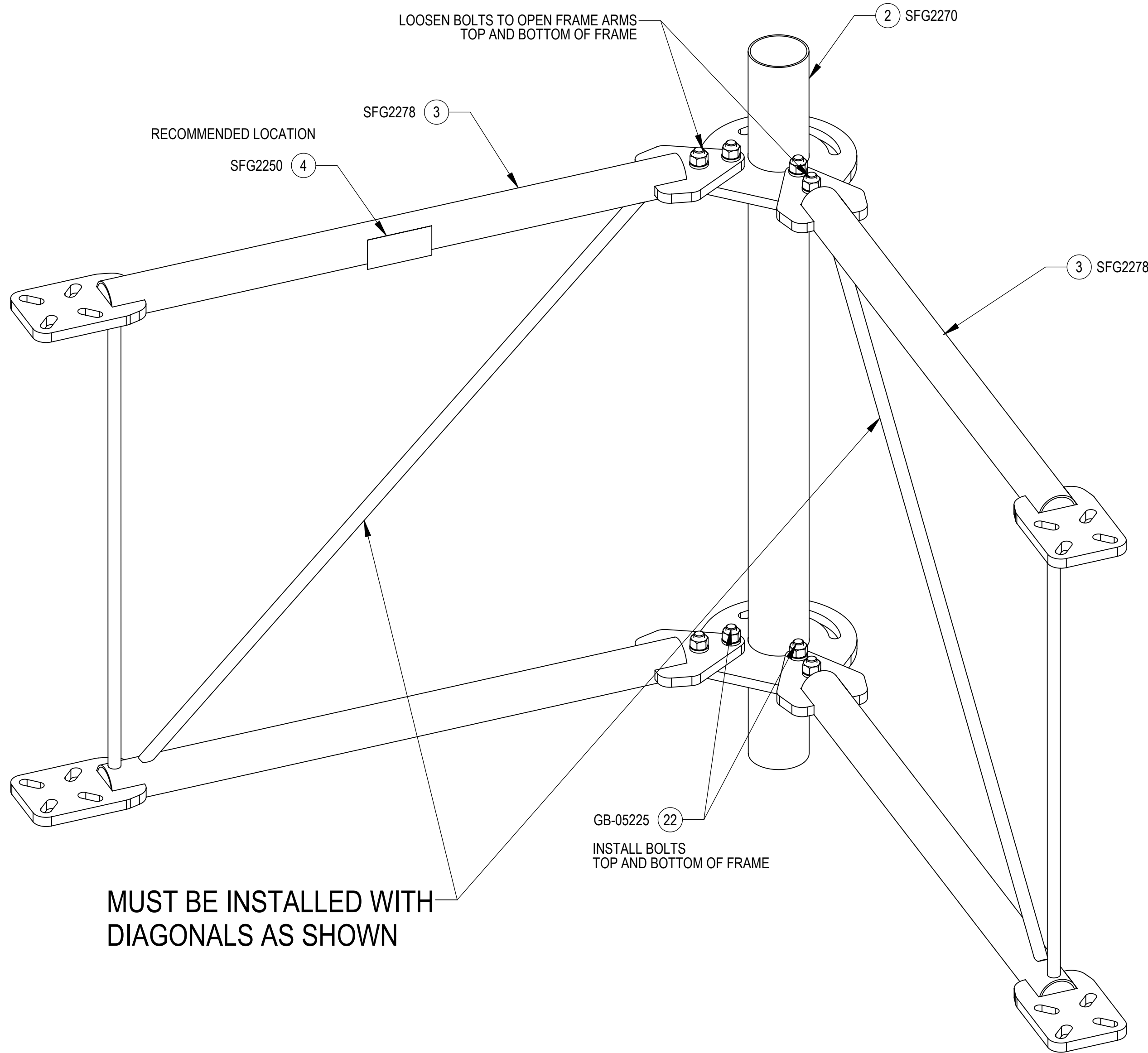
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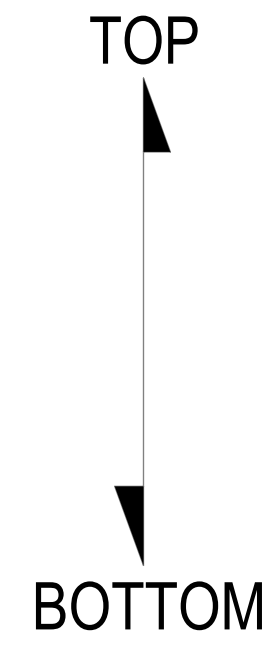
INSTALLATION SEQUENCE - REFERENCE ONLY

STEP 1: LOOSEN BOLT KITS (GB-05225) TO OPEN FRAME SUPPORT ARMS. INSTALL ADDITIONAL 4X BOLT KITS (GB-05225).



MUST BE INSTALLED WITH DIAGONALS AS SHOWN

ISO VIEW



PATENT PENDING

COMMSCOPE, INC. OF NORTH CAROLINA				
TITLE SFG22HD SECTOR FRAME SERIES				
SIZE C	SCALE 1:4	DOCUMENT NO. SFG22HD		
		DRAWING		SHEET
		VERSION	STATUS	REVISION
		07	RE	B
				4 OF 9

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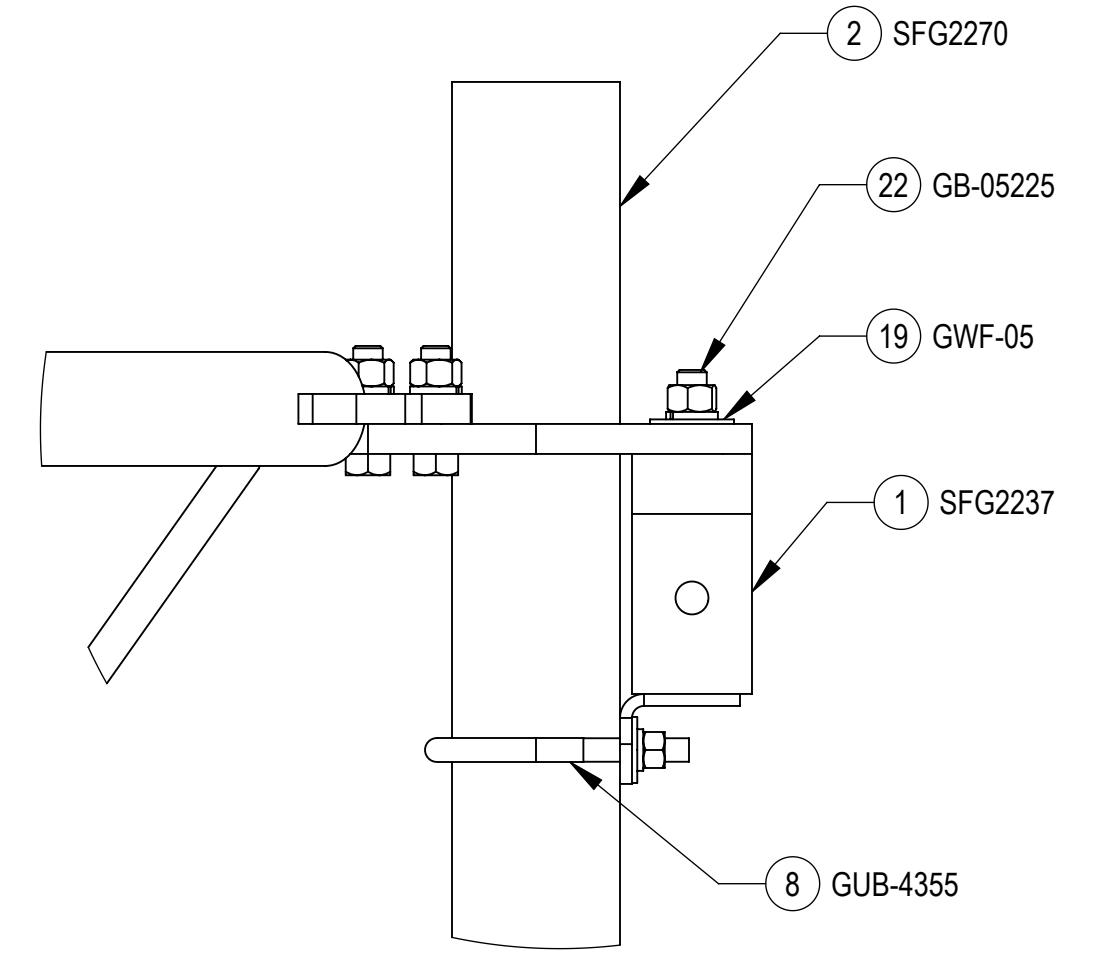
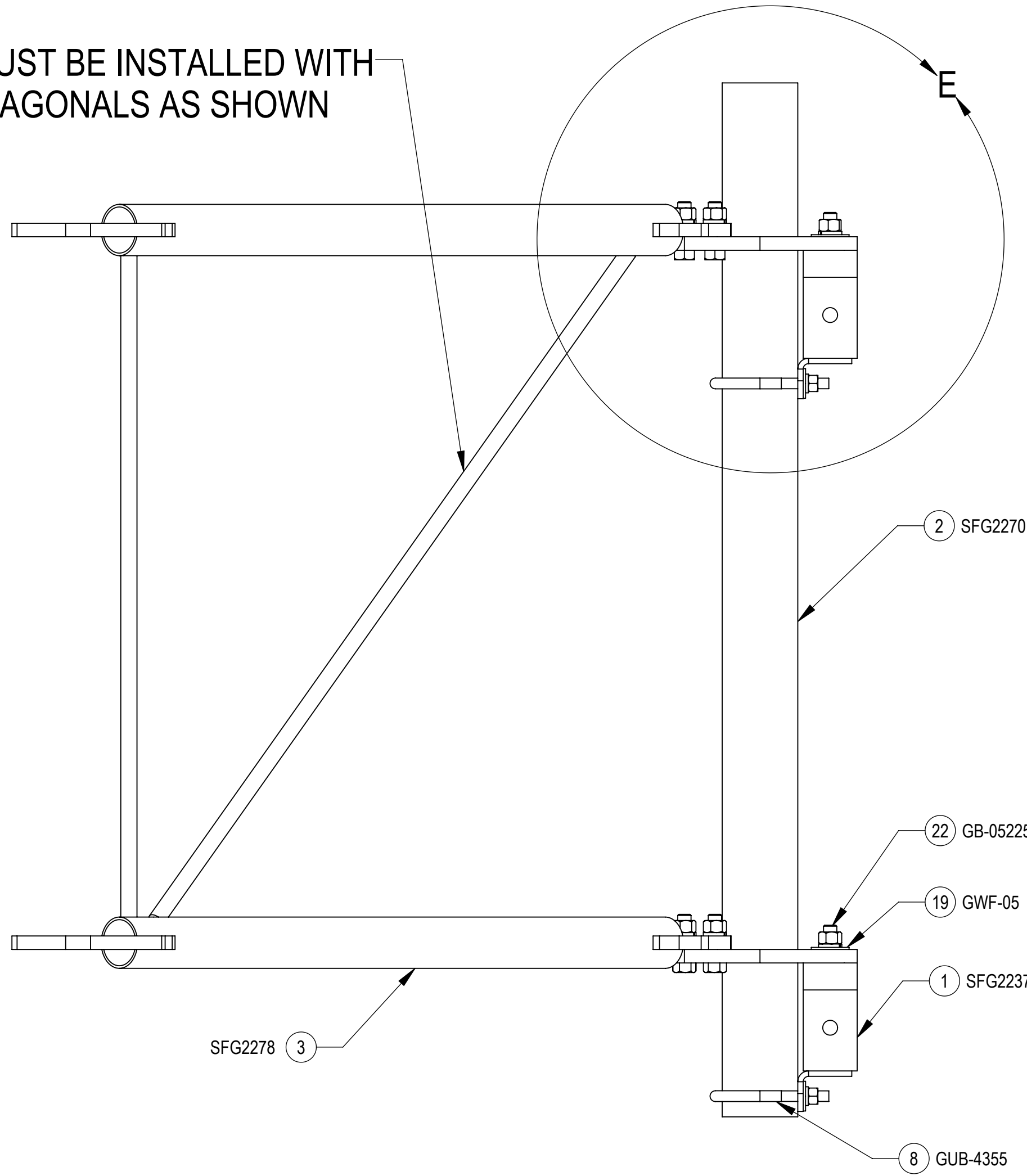
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NOTES:

STEP 2: ATTACH AZIMUTH/TAPER BRACKET (SFG2237) TO BACK VERTICAL ARM MOUNT (SFG2270) USING BOLT KITS (GB-05225), U-BOLTS (GUB-4355) AND FLAT WASHERS (GWF-05).

MUST BE INSTALLED WITH DIAGONALS AS SHOWN



DETAIL E
SCALE 1 : 4

TOP
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BOTTOM

SIDE VIEW

PATENT PENDING

COMMSCOPE, INC. OF NORTH CAROLINA				
TITLE SFG22HD SECTOR FRAME SERIES				
SIZE C	SCALE 1:6	DOCUMENT NO. SFG22HD		
DRAWING		REVISION		SHEET
VERSION 07	STATUS RE	REVISION B	5 OF 9	

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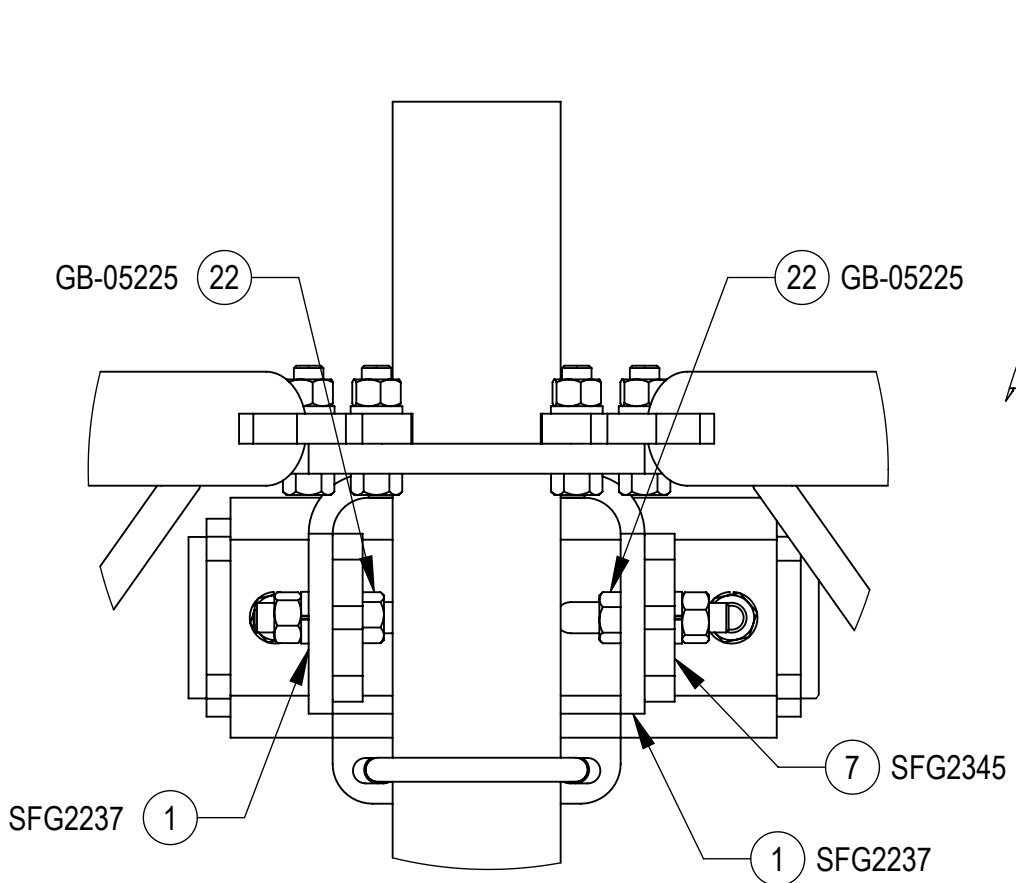
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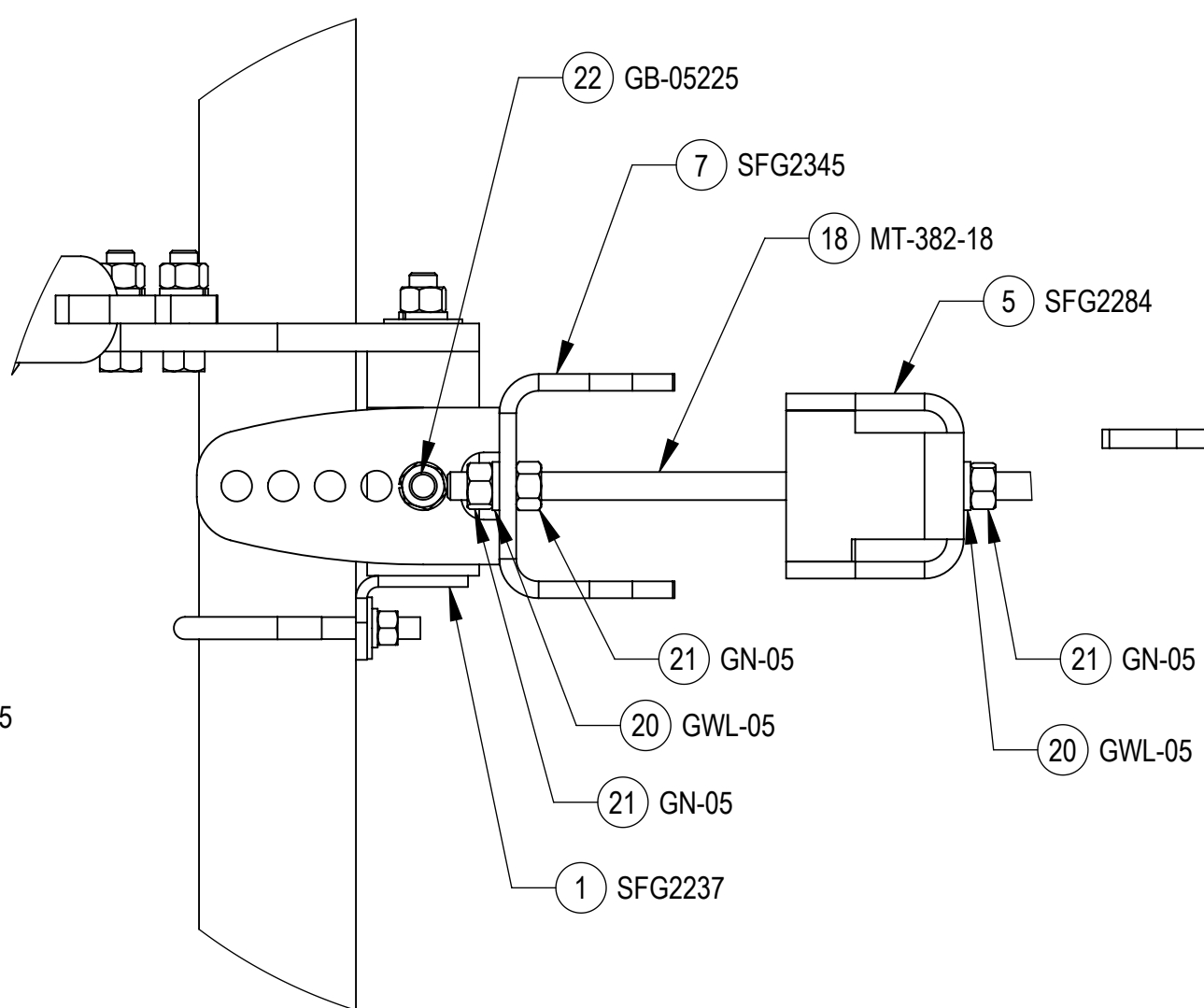
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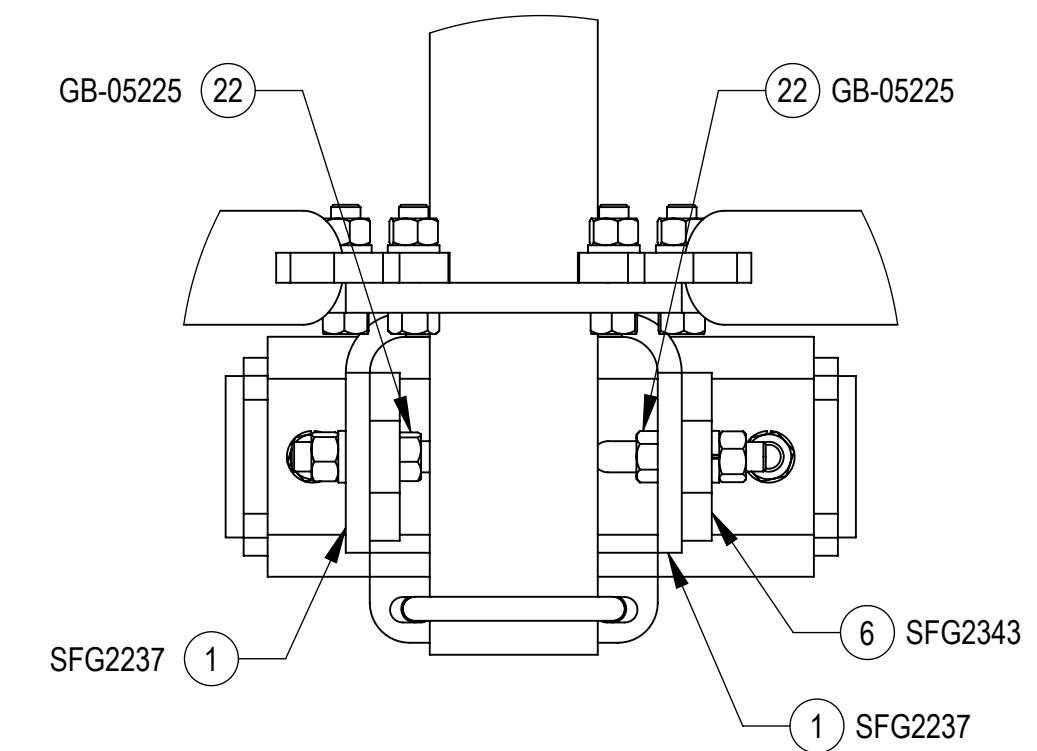
STEP 3: AT TOP, ATTACH TOP TAPER BRACKET (SFG2345) TO AZIMUTH/TAPER BRACKET (SFG2237) USING BOLT KITS (GB-05225);
AT BOTTOM, ATTACH LOWER TOWER LEG BRACKET (SFG2343) TO AZIMUTH/TAPER BRACKET (SFG2237) USING BOLT KITS (GB-05225).



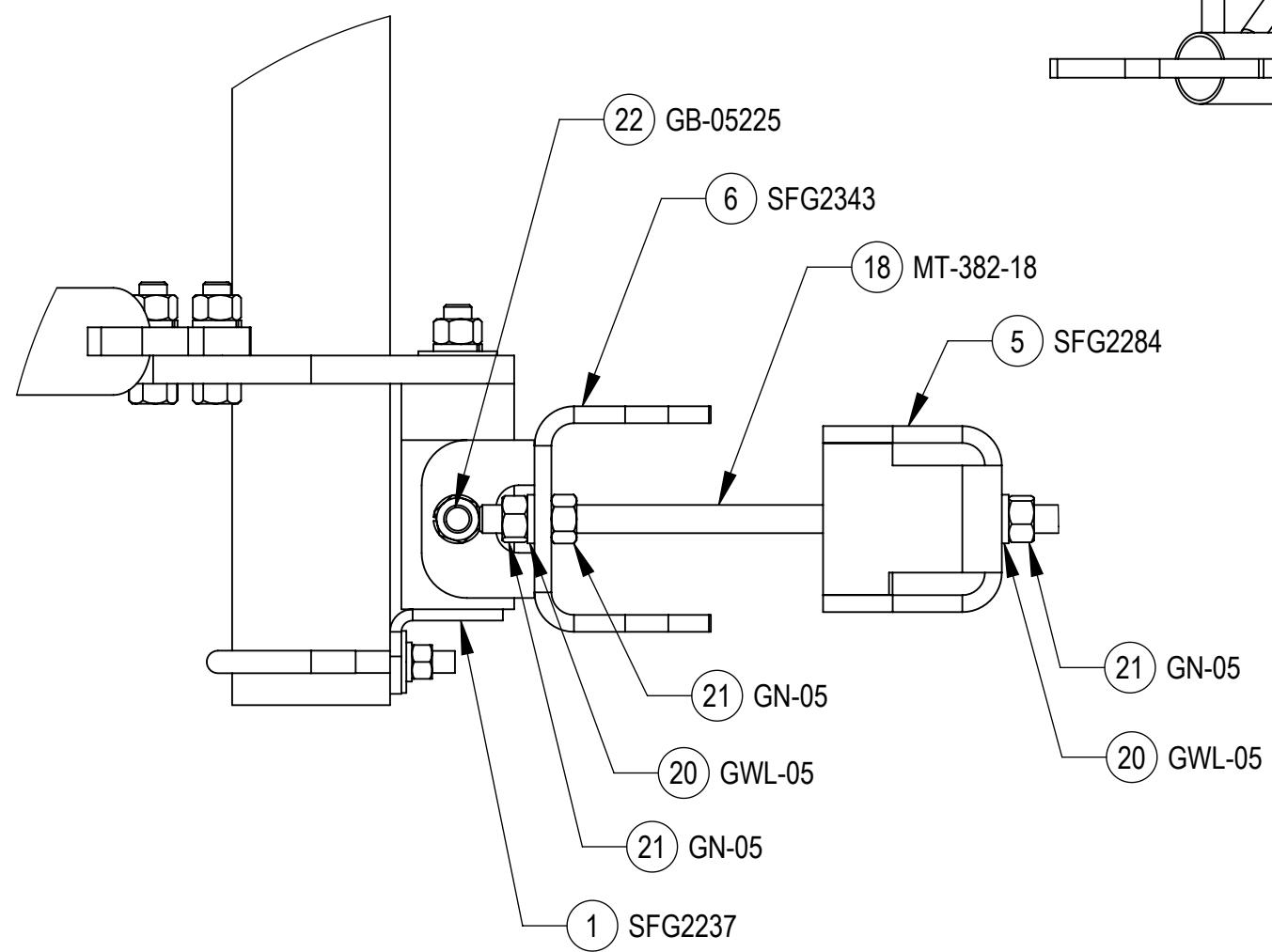
DETAIL FRONT VIEW OF TOP MOUNT
SCALE 1 : 4



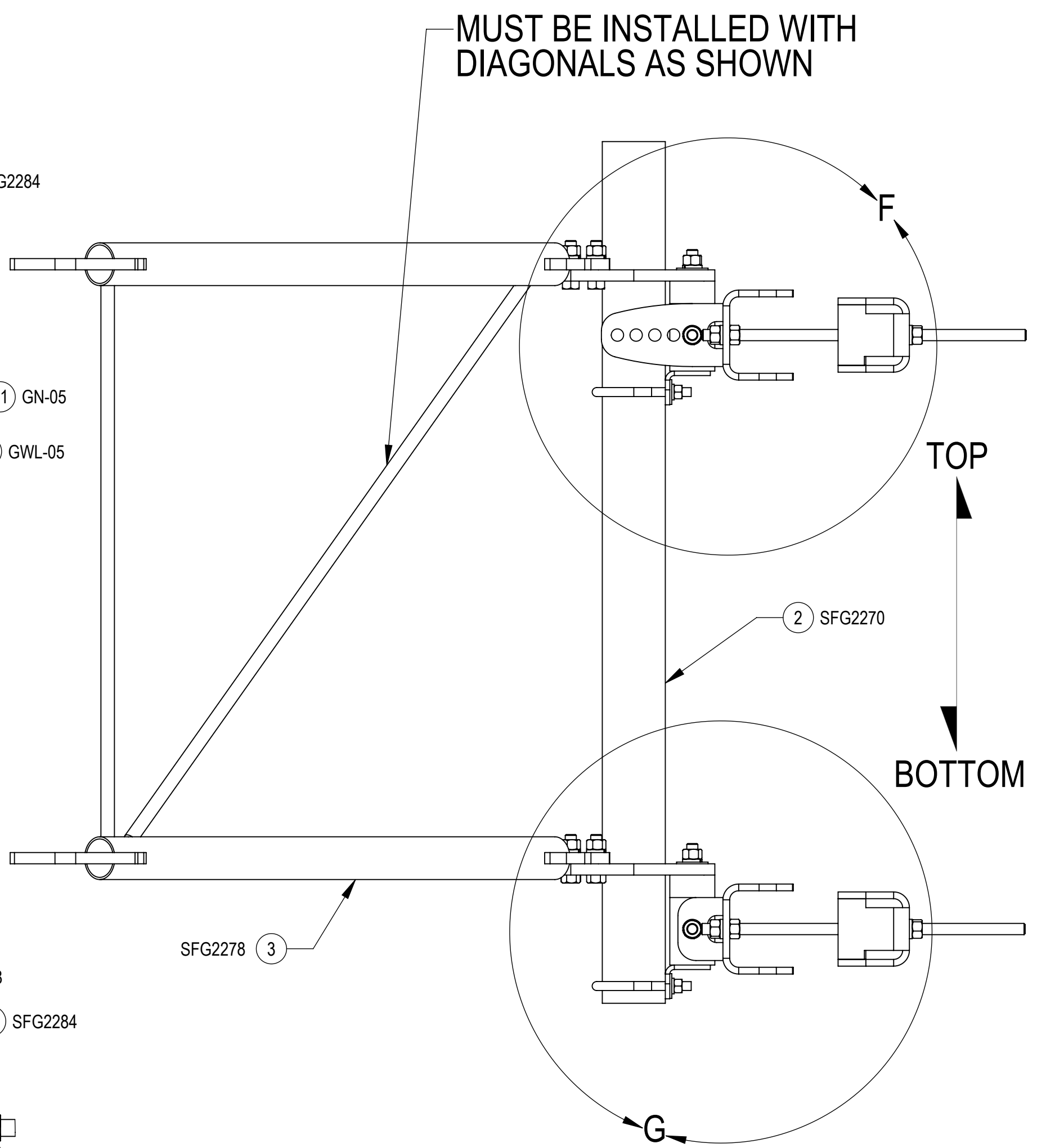
DETAIL F
SCALE 1 : 4



DETAIL FRONT VIEW OF BOTTOM MOUNT
SCALE 1 : 4



DETAIL G
SCALE 1 : 4



PATENT PENDING

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TITLE SFG22HD SECTOR FRAME SERIES				
SIZE C	SCALE 1:6	DOCUMENT NO. SFG22HD		
DRAWING		VERSION	STATUS	REVISION
SHEET		07	RE	B
6 OF 9				

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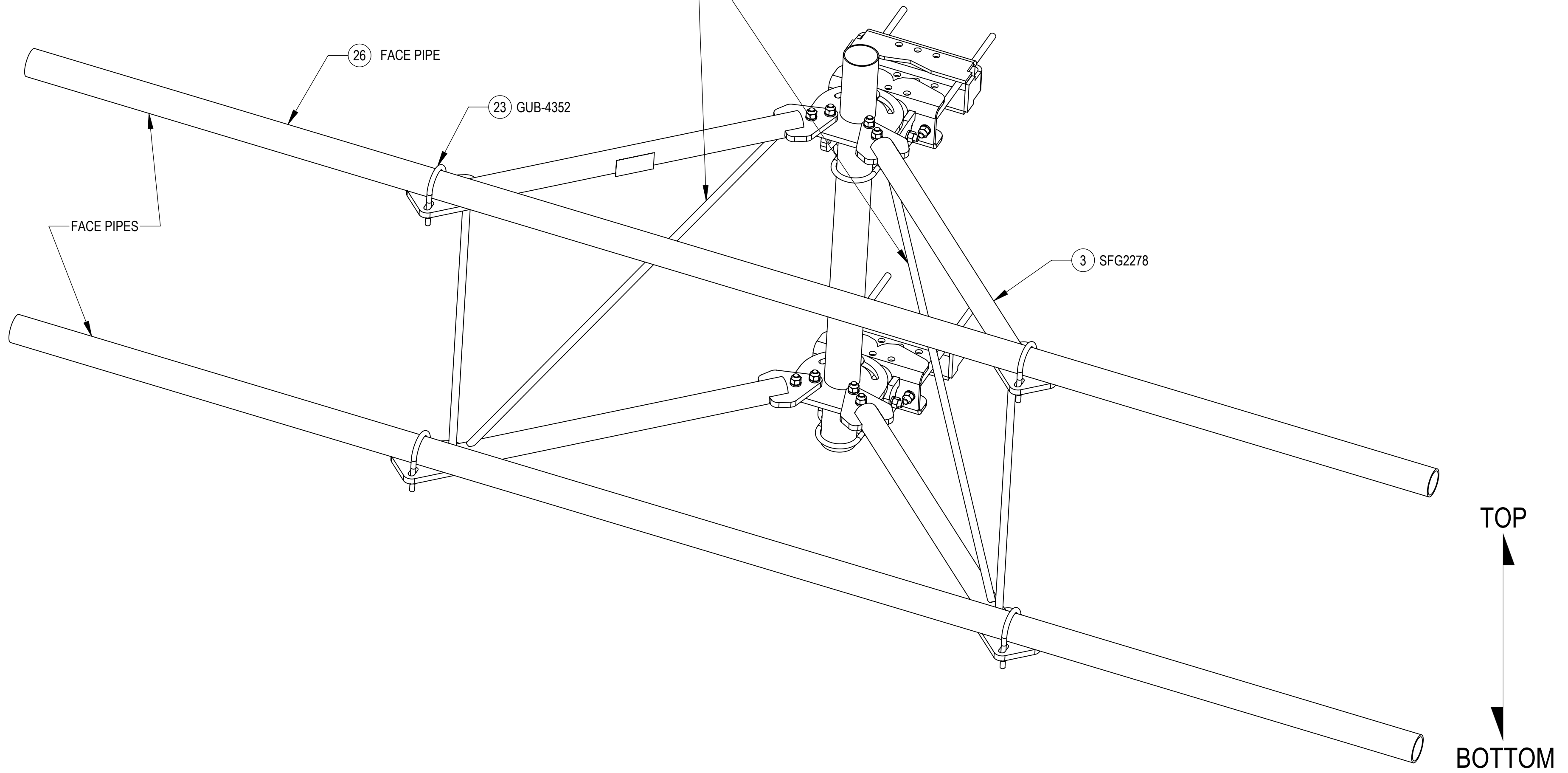
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NOTES:

STEP 4: ATTACH FACE PIPES TO STANDOFF ARMS (SFG2278) USING U-BOLTS (GUB-4352).

MUST BE INSTALLED WITH
DIAGONALS AS SHOWN



ISO VIEW

PATENT PENDING

COMMSCOPE, INC. OF NORTH CAROLINA

TITLE
SFG22HD SECTOR FRAME SERIES

SIZE C	SCALE 1:8	DOCUMENT NO. SFG22HD
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	DRAWING			SHEET 7 OF 9
	VERSION 07	STATUS RE	REVISION B	

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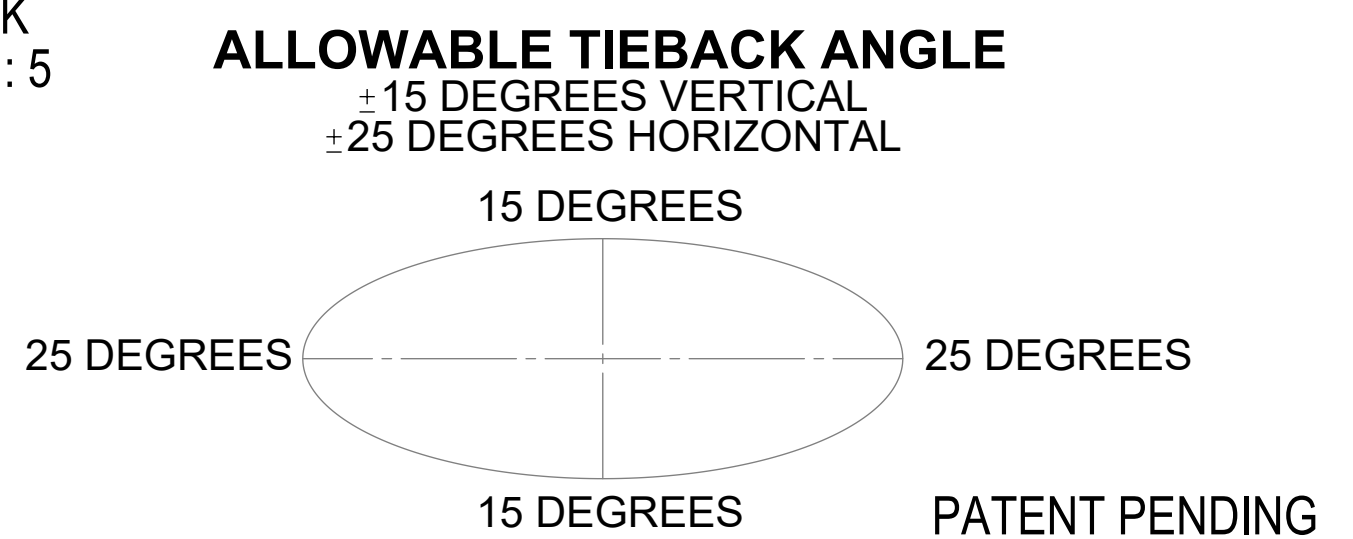
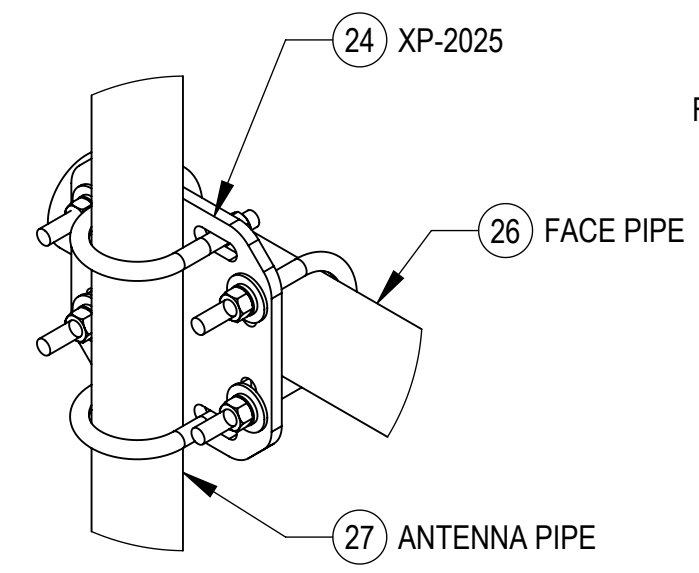
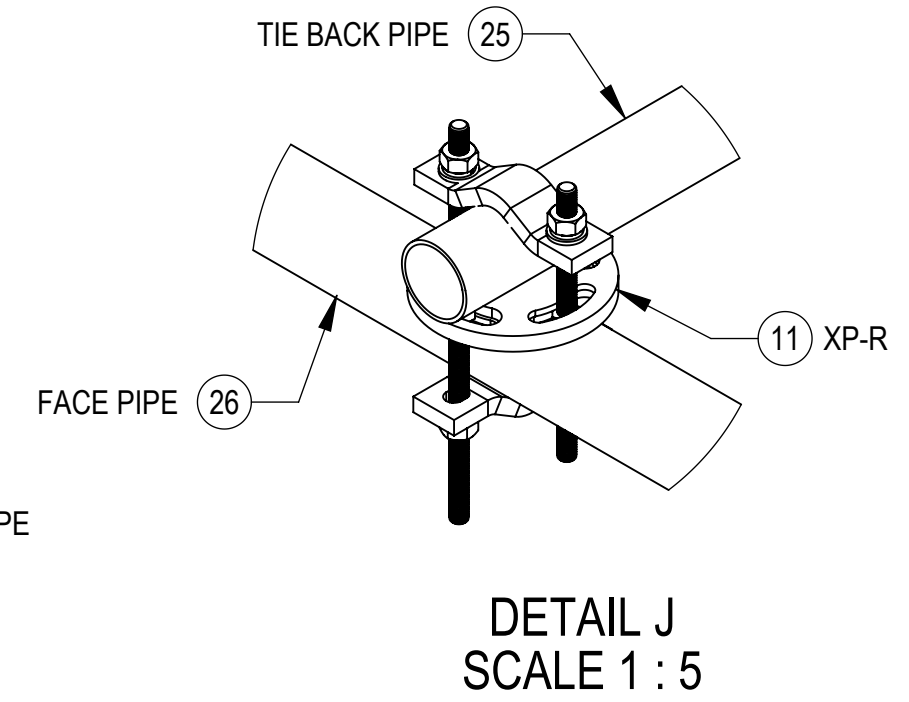
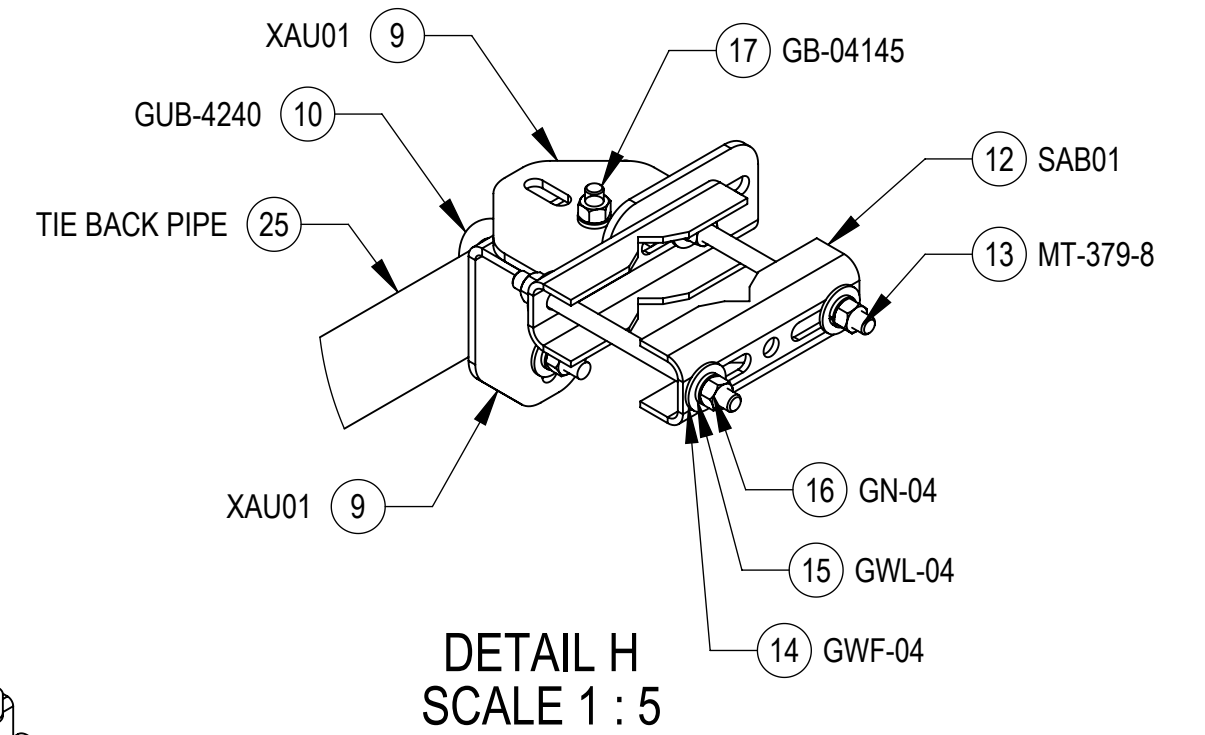
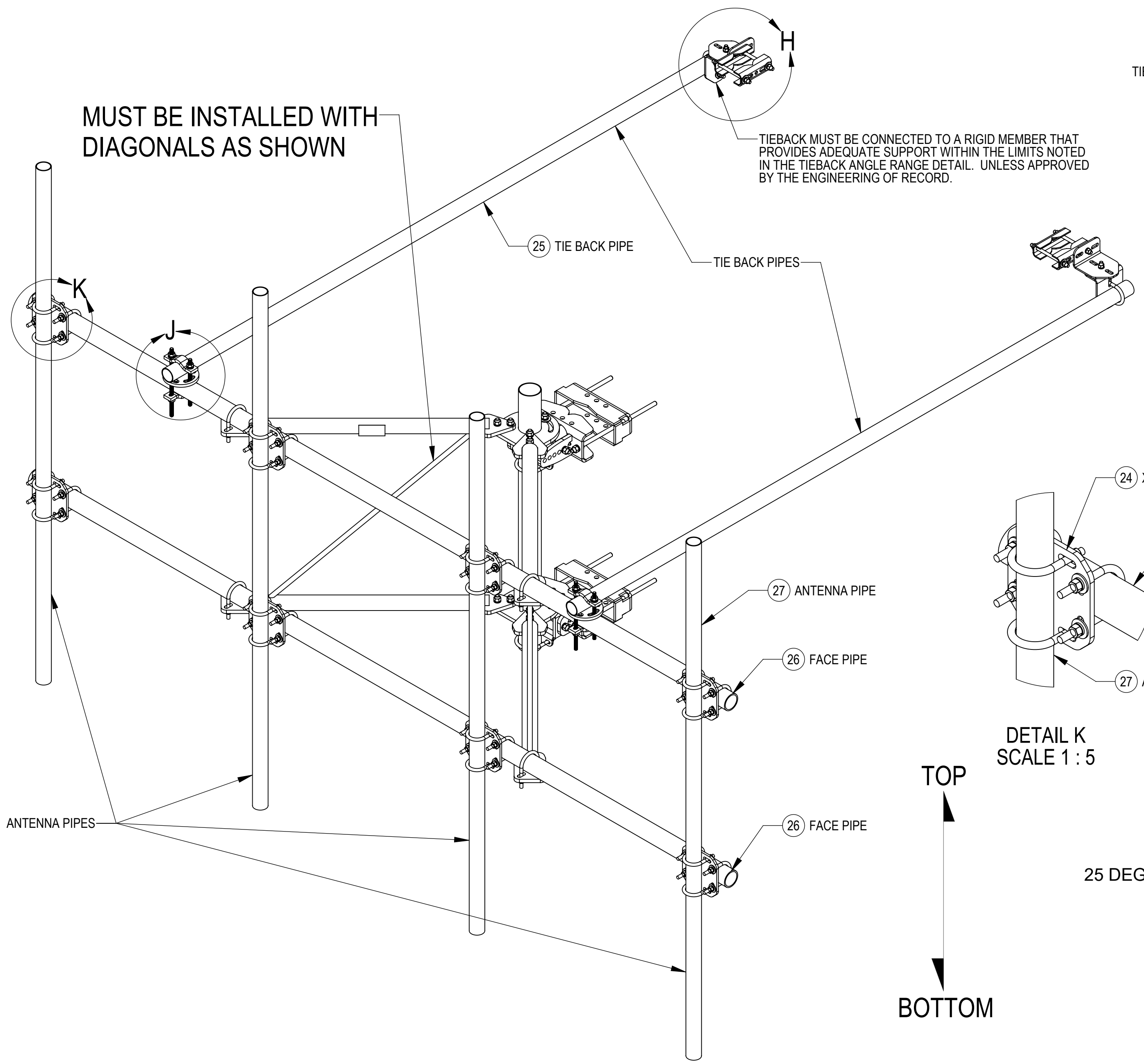
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NOTES:

STEP 5: ATTACH ANTENNA PIPES TO FACE PIPES USING CROSSOVER PLATE KITS (XP-2025).
ATTACH TIE BACK PIPES TO FACE PIPES USING ROUND CROSSOVER PLATE KITS (XP-R).

**MUST BE INSTALLED WITH
DIAGONALS AS SHOWN**

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 THE ENGINEERING OF RECORD.



TOP
 ↓
 BOTTOM

ISO VIEW

COMMSCOPE, INC. OF NORTH CAROLINA			
TITLE SFG22HD SECTOR FRAME SERIES			
SIZE C	SCALE 1:12	DOCUMENT NO. SFG22HD	
DRAWING		SHEET	
VERSION 07	STATUS RE	REVISION B	8 OF 9

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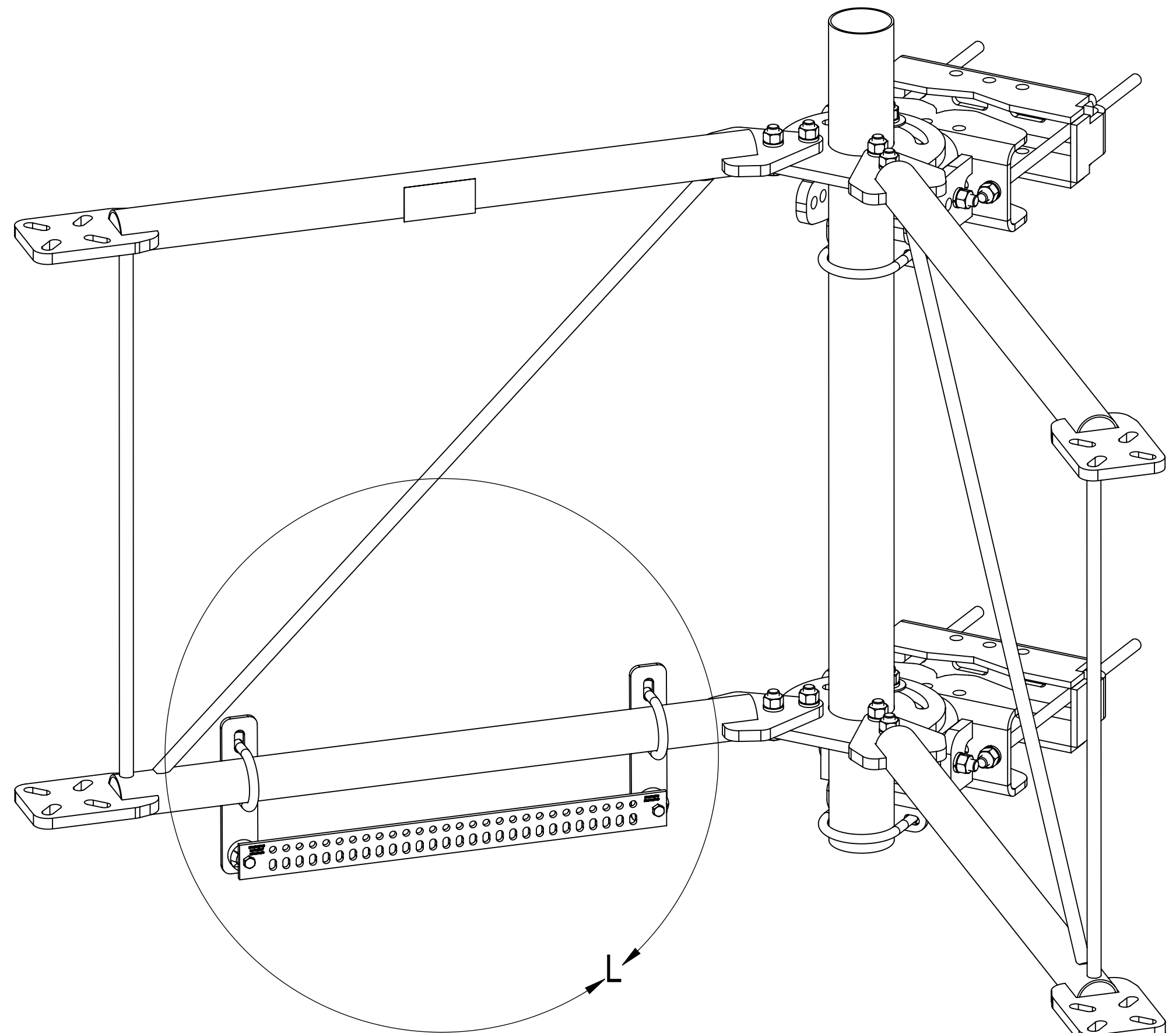
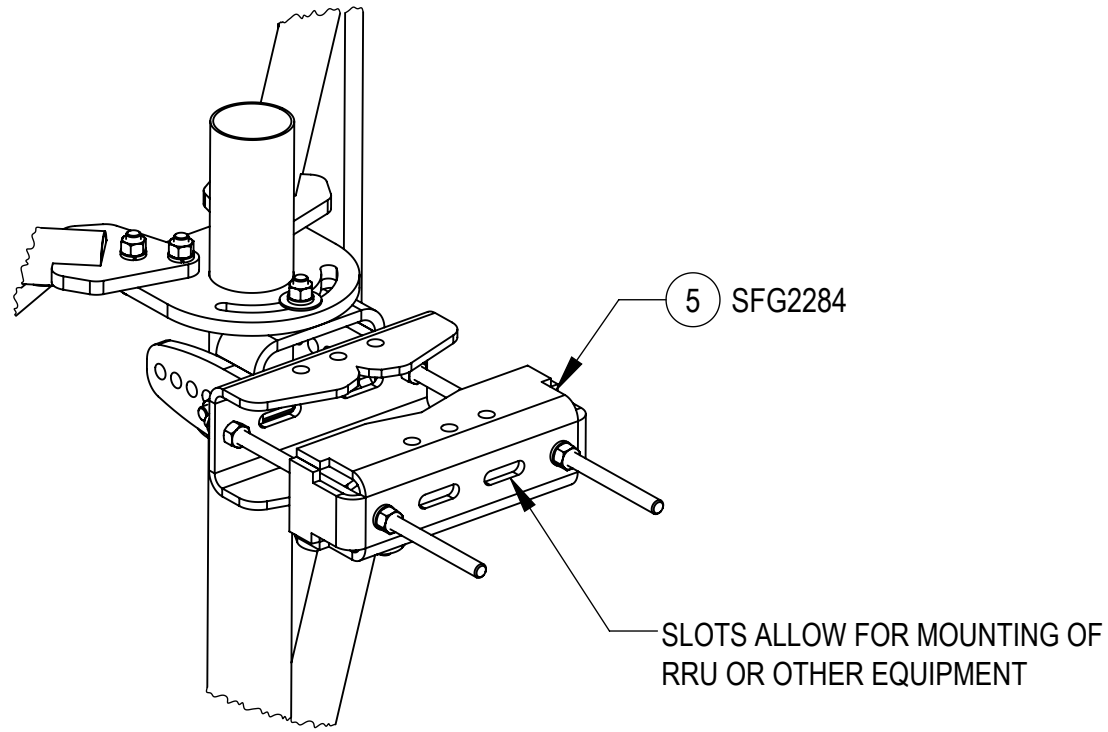
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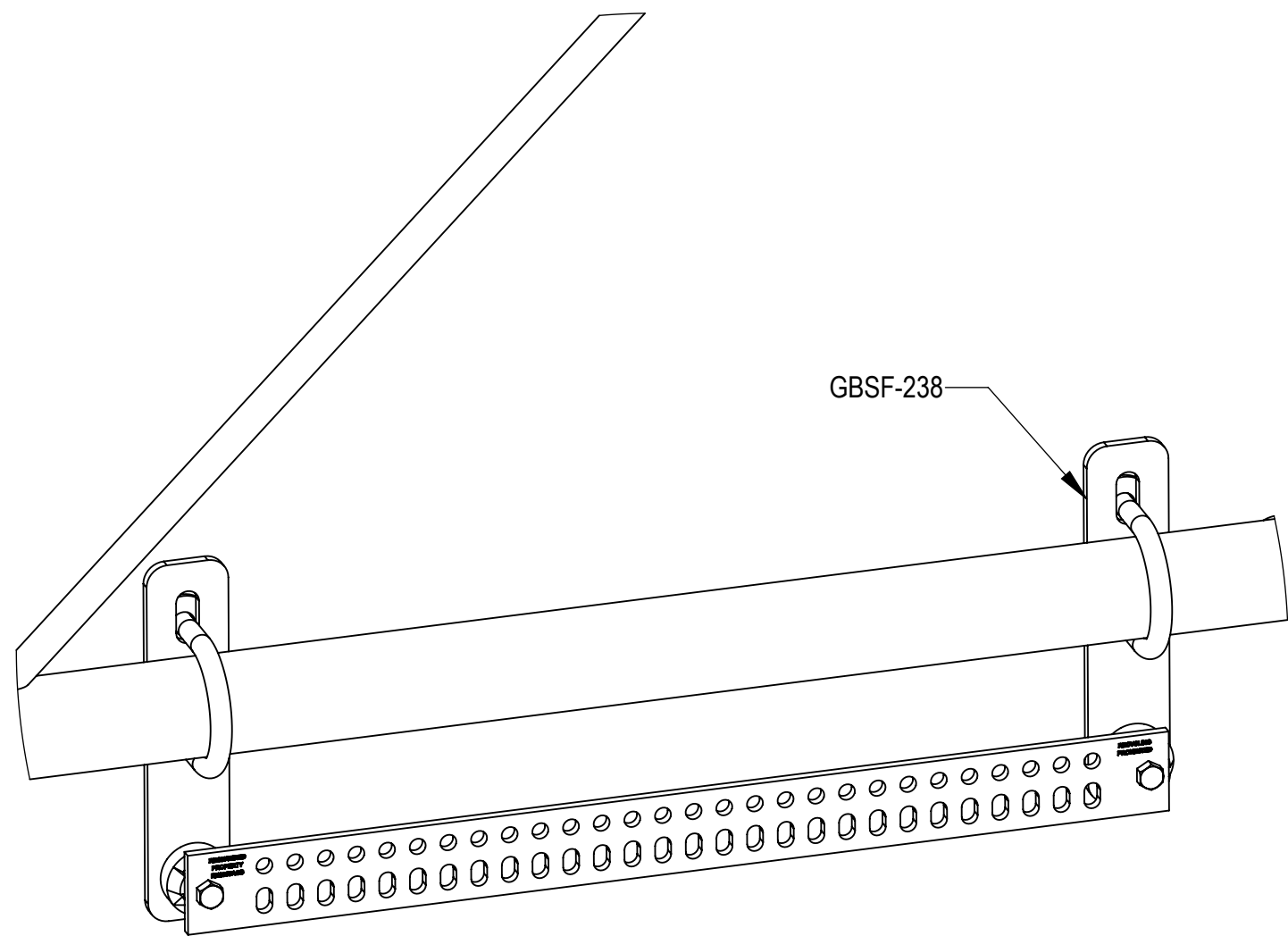
NOTES:

OPTIONAL ACCESSORIES:

BUSS BAR MOUNT KIT GBSF-238 IS WELL SUITED TO BE USED SHOULD THE NEED ARISE
NOTE THAT THIS KIT DOES NOT INCLUDE THE ISOLATORS OR BUSS BAR



ISO VIEW



DETAIL L
SCALE 1 : 4

COMMScope, INC. OF NORTH CAROLINA				
TITLE SFG22HD SECTOR FRAME SERIES				
SIZE C	SCALE 1:12	DOCUMENT NO. SFG22HD		
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		VERSION 07	STATUS RE	

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