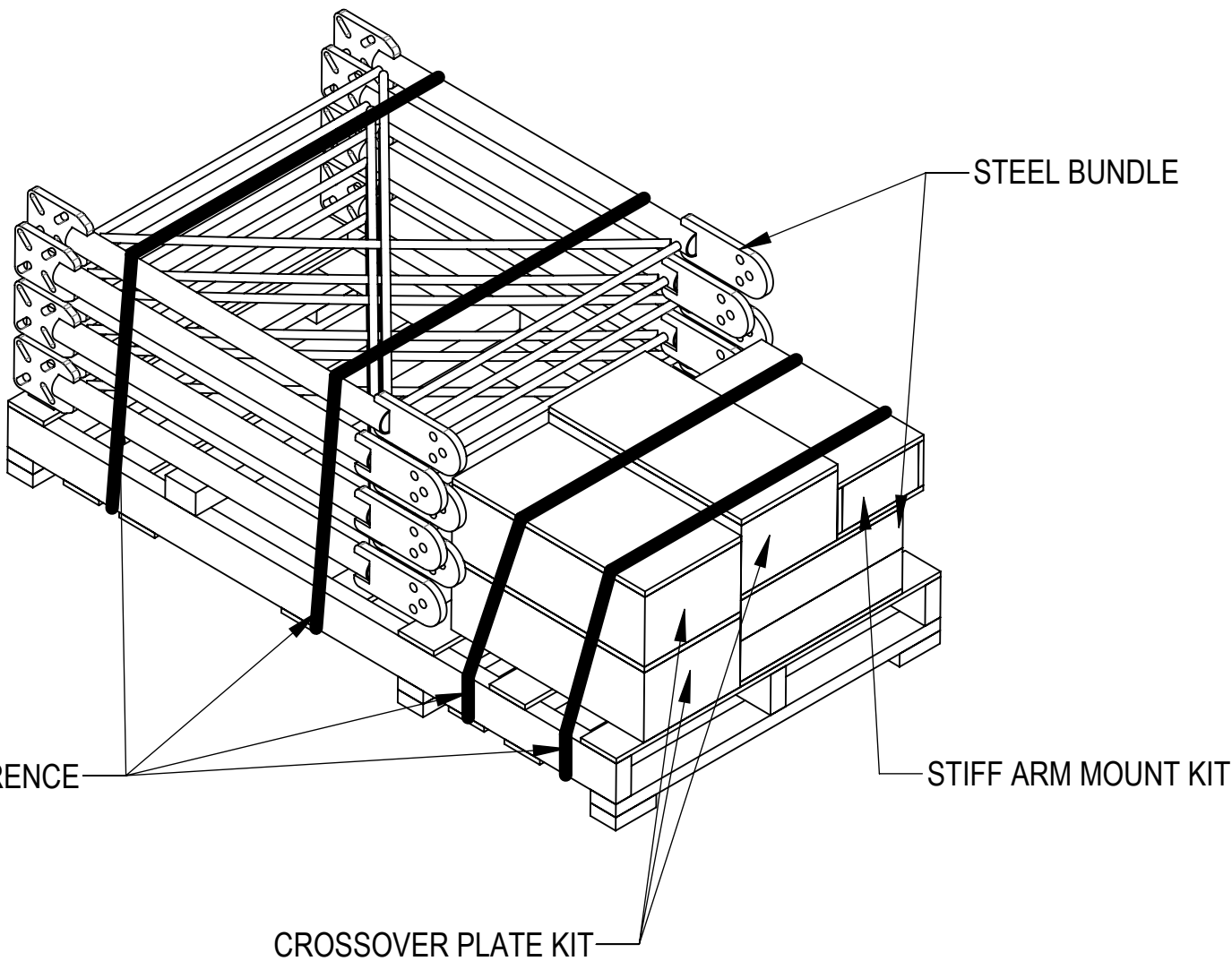
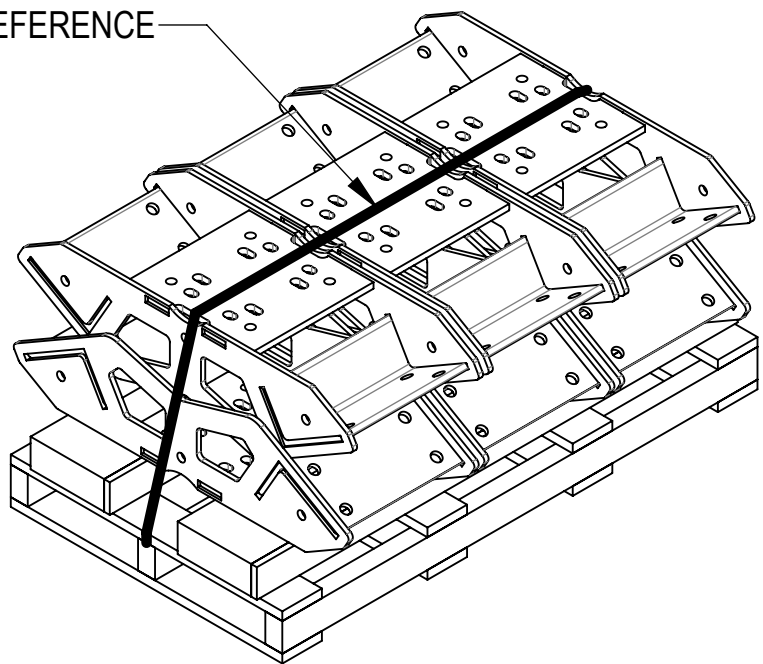
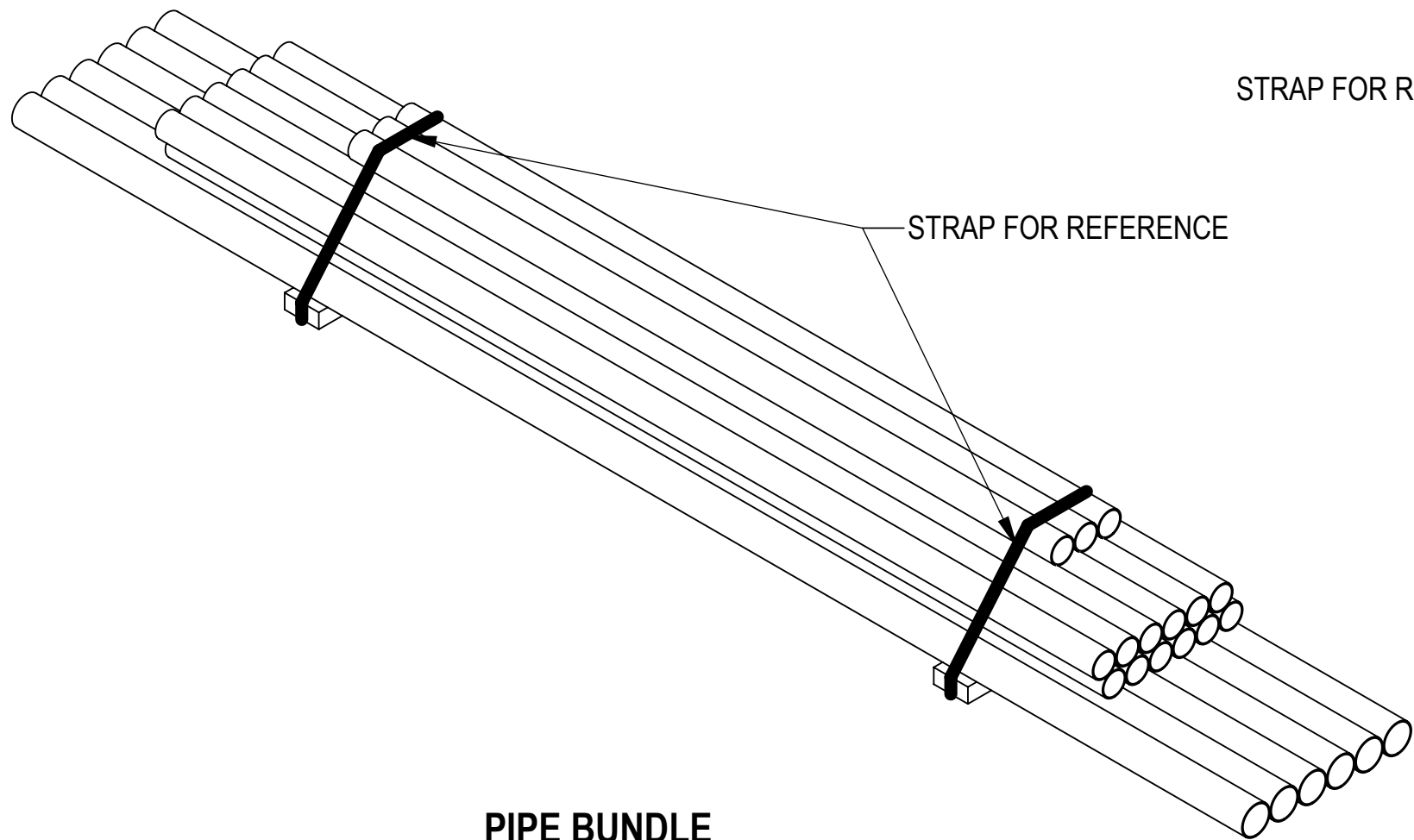


- 4
- 3
- 2
- 1
- 1.0 GENERAL NOTES
- 1.1 ALL METRIC DIMENSIONS ARE IN BRACKETS [X. X]
- 1.2 FOR PATENT INFO: <https://www.adwpat.com>
- 2.0 DESIGN NOTES
- 2.1 ANY HAZARDS OR OBSTRUCTIONS TO THE CLIMBING FACILITY AND SAFETY CLIMB MUST BE IDENTIFIED PRIOR TO INSTALLING THE APPURTENANCE. ADDITIONAL PRODUCTS 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 FITS MONOPOLES 15"-50" O.D.
- 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	ES 25APR19	RD1048 8000032387
B	MCG21HD SERIES BOM STANDARDIZATION	YX1027 18APR22	BCROSS 40146977CMO
C	NOTES STANDARDIZATION; TIE BACK PIPES TO FACE PIPES CONNECTION REPLACED XA WITH XP-R	YX1027 24OCT22	BCROSS 40159351CMO
D	ADDED SHEET 2; ITEM 13 WAS SFG2251; MOVED LOCATION OF ITEM 13 TO THE TOP OF V-ARM	RY1002 28AUG23	YW1045 40177837CMO
E	SHEET2: ADDED SFG2152 TO TABLE 1; SHEET5: ADDED LABEL INSTALLATION NOTICE	JL1183 17NOV23	YW1045 40183325CMO



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TOLERANCES						SAP MATERIAL MASTER					
1 PLACE .X[X] ± 0.25[6.3]			3 PLACE .XXX[X] ± 0.060[1.5]			SEE TABLE 1					
2 PLACE .XX[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	SECTOR FRAME - MCG21HD							
	CE	YX1027	4/18/2022								
	RW	YC1059	06/05/2025								
	AD	YMENG	06/05/2025	SCALE 1:12	DOCUMENT NO. MCG21HD						
	RE	YMENG	06/05/2025								
	ECN 40183325CMO										
SIZE	Auth Group	INSL	MODEL			DRAWING			SHEET		
C			VERSION	STATUS	REVISION	VERSION	STATUS	REVISION	1 OF 7		
			03	RE	D	04	RE	E			

DENSITY	0.10	lbs/in³
MASS	1473.11	lbs
VOLUME	14472.50	in³
SURFACE AREA		in²
HEIGHT		
LENGTH		
WIDTH		

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PART NUMBERS, WEIGHTS, & EPA

TABLE 1: CONFIGURATIONS

						INCLUDED PARTS																
PART NUMBER	DESCRIPTION	WEIGHT (LBS)	(EPA)A (FT²)*	(EPA)A 1/2" ICE THICKNESS (FT²)*	ANTENNA PIPES	MC-RM1550-3D	MCG22-HK01	MCG21HD-SB01	PB0306A0610B	XA-2030-3	XA-2030-4	PB0908A0306A0610B	PB0910A0306A0610B	PB1208A0306A0610B	PB1210A0306A0610B	PB0308A0612B	PB1208A0612B	PB0910A0308A0612B	PB1508A0612B	PB1210A0308A0612B	SFG2152	
MCG21HD-10M-B	TRPL SECTR FRM KIT 10'6" FACE, NO AP	1082.7	12.18	19.43	-	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	1	
MCG21HD-10M-9-96	TRPL SECTR FRM KIT 10'6" FACE, 9 96" AP	1375.5			9	1	1	1	-	3	-	1	-	-	-	-	-	-	-	-	-	1
MCG21HD-10M-9-126	TRPL SECTR FRM KIT 10'6" FACE, 9 126" AP	1440.3			9	1	1	1	-	3	-	-	1	-	-	-	-	-	-	-	-	1
MCG21HD-10M-12-96	TRPL SECTR FRM KIT 10'6" FACE, 12 96" AP	1473.1			12	1	1	1	-	-	3	-	-	1	-	-	-	-	-	-	-	1
MCG21HD-10M-12-126	TRPL SECTR FRM KIT 10'6" FACE, 12 126"AP	1559.5			12	1	1	1	-	-	3	-	-	-	1	-	-	-	-	-	-	1
MCG21HD-12M-B	TRPL SECTR FRM KIT 12'6" FACE, NO AP	1142.7	13.84	21.68	-	1	1	1	-	-	-	-	-	-	-	1	-	-	-	-	1	
MCG21HD-12M-9-96	TRPL SECTR FRM KIT 12'6" FACE, 9 96" AP	1418.0			9	1	1	1	-	3	-	-	-	-	-	-	1	-	-	-	-	1
MCG21HD-12M-9-126	TRPL SECTR FRM KIT 12'6" FACE, 9 126" AP	1482.8			9	1	1	1	-	3	-	-	-	-	-	-	-	-	1	-	-	1
MCG21HD-12M-12-96	TRPL SECTR FRM KIT 12'6" FACE, 12 96" AP	1533.1			12	1	1	1	-	-	3	-	-	-	-	-	-	-	-	1	-	1
MCG21HD-12M-12-126	TRPL SECTR FRM KIT 12'6" FACE, 12 126"AP	1619.5			12	1	1	1	-	-	3	-	-	-	-	-	-	-	-	-	-	1

* (EPA)A DOES NOT INCLUDE ANTENNA PIPES AND MOUNTING HARDWARE. IF DESIRED, ADD ANTENNA PIPE PER TABLE 2



TABLE 2: EPA OF EACH ANTENNA PIPE

ANTENNA PIPE	(EPA)A (FT²)	(EPA)A W/ 1/2" ICE THICKNESS (FT²)
2-3/8" X 96"	1.53	2.17
2-3/8" X126"	2.00	2.83

- NOTE:
- ANTENNA PIPES ARE CONSIDERED SEPARATELY.
 - KA FACTOR OF 3-SECTOR EPA INCLUDED.
 - 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, MCG21HD-10M-9-96 HAS A 3-SECTOR EPA OF 12.18 FT² WITH NO ICE PLUS 9 ANTENNA PIPES WITH A 3-SECTOR EPA OF 9X1.53=13.77 FT² WITH NO ICE.
SO, THE TOTAL EPA OF 25.95 FT² FOR THE MCG21HD-10M-9-96.



TITLE
SECTOR FRAME - MCG21HD

SIZE
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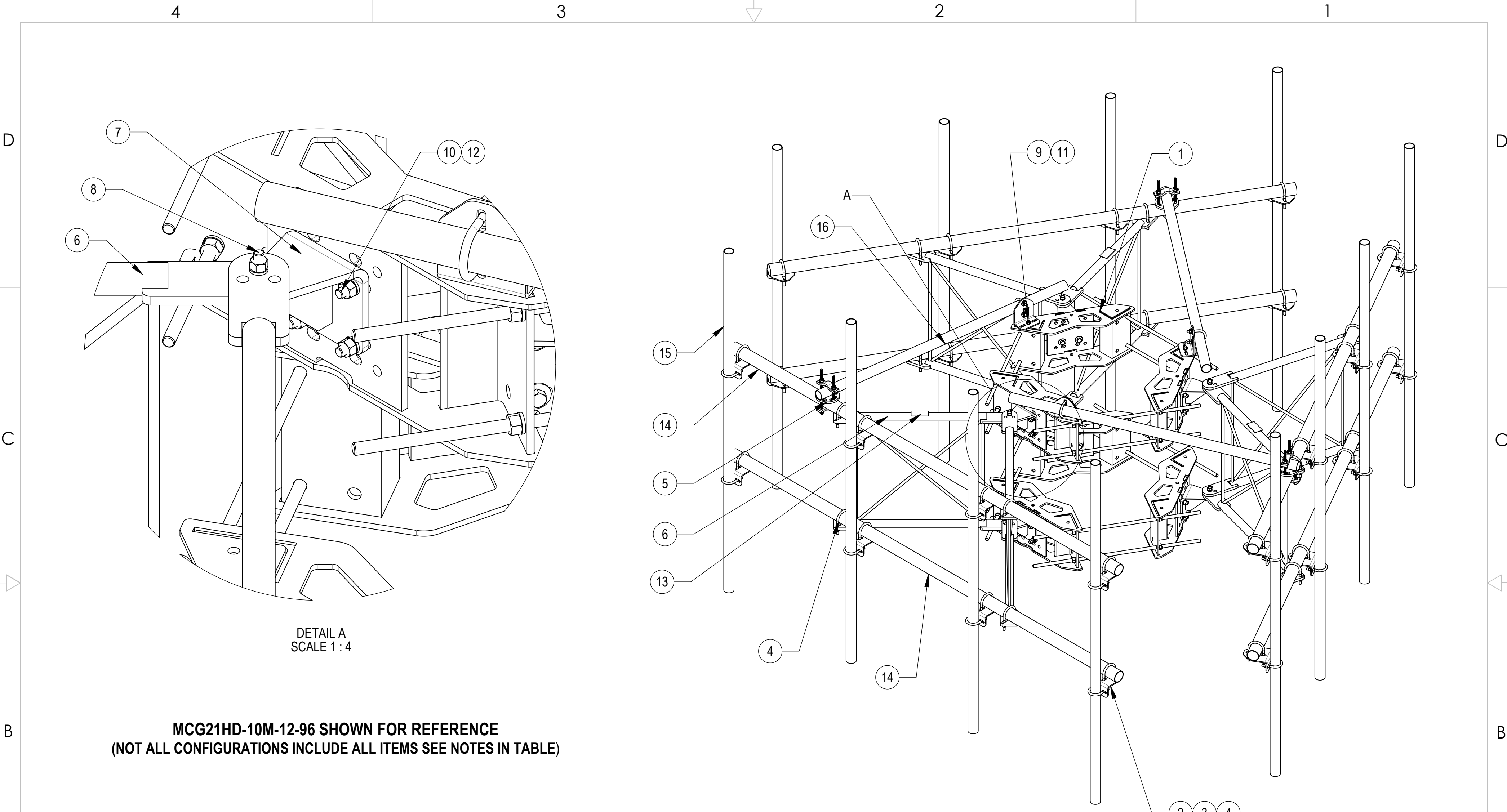
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**MCG21HD-10M-12-96 SHOWN FOR REFERENCE
(NOT ALL CONFIGURATIONS INCLUDE ALL ITEMS SEE NOTES IN TABLE)**

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
1	MC-RM1550-3	15" - 50" OD RINGMOUNT	2	229.90 LBS	
2	XAU01	ANGLE, CROSSOVER, 1.9-3.5" X 1.9-3.5" OD	27	2.98 LBS	QTY SEE INDIVIDUAL DRAWING
3	GUB-4240	1/2" X 2-1/2" X 4" GALV U-BOLT	27	0.56 LBS	QTY SEE INDIVIDUAL DRAWING
4	GUB-4352	1/2" X 3" X 5-1/4" GALV U-BOLT	36	0.71 LBS	QTY SEE INDIVIDUAL DRAWING
5	XP-R	CROSSOVER PLATE, ROUND, UP TO 3.5" OD	3	6.20 LBS	
6	SFV01	WELDMENT, SF-V STANDOFF ARM	6	38.31 LBS	
7	MCG2305	BRACKET, MCG12	6	10.35 LBS	
8	GB-05305	5/8" X 3" GALV BOLT KIT	6	0.35 LBS	
9	GB-04145	1/2" X 1-1/2" GALV BOLT KIT	3	0.13 LBS	
10	GB-05225	5/8" X 2-1/4" GALV BOLT KIT	24	0.28 LBS	
11	GWf-04	1/2" GALV FLAT WASHER	3	0.04 LBS	
12	GWf-05	5/8" GALV FLAT WASHER, 1.7OD	24	0.06 LBS	
13	SFG2152	LABEL, SFG21HD	3	0.04 LBS	
14	MT546126120	PIPE, 2.875"OD X 126"	6	37.21 LBS	PART NO. SEE INDIVIDUAL DRAWING
15	MT-651-96	2.375" OD X 96" PIPE	12	23.05 LBS	PART NO. AND QTY SEE INDIVIDUAL DRAWING
16	MT-651	2.375" OD X 72" PIPE	3	17.44 LBS	PART NO. SEE INDIVIDUAL DRAWING



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TITLE

SECTOR FRAME - MCG21HD

SIZE

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DOCUMENT NO.

MCG21HD





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VERSION

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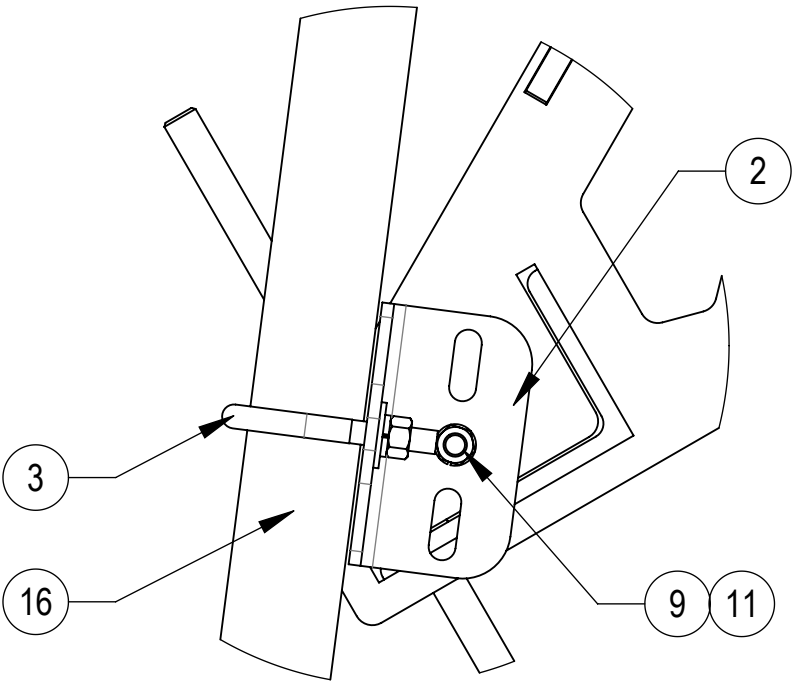
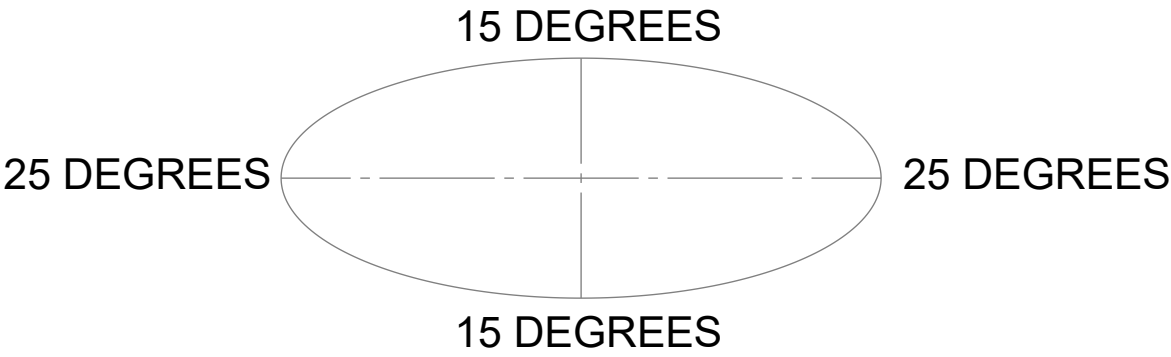
SHEET

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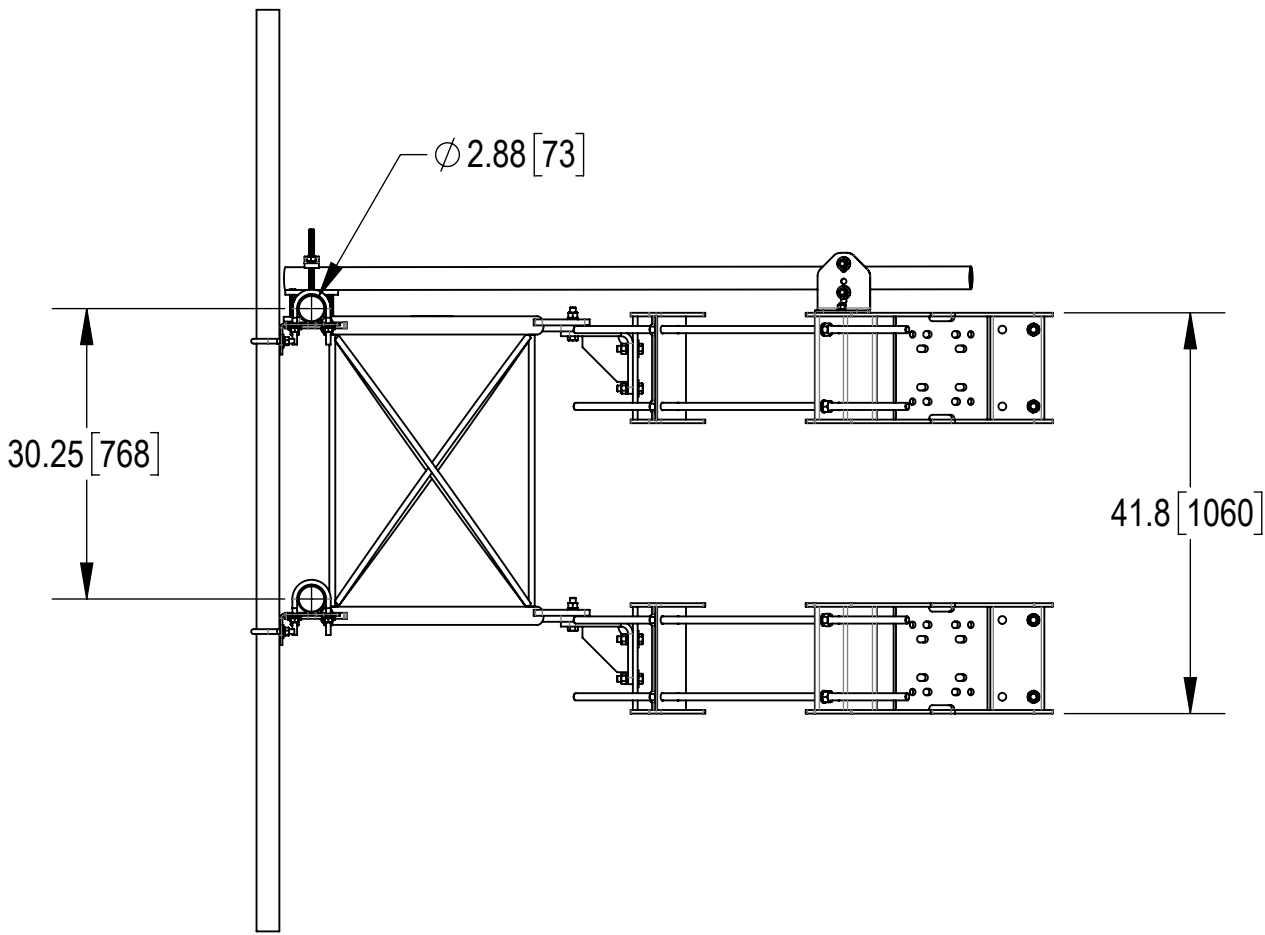
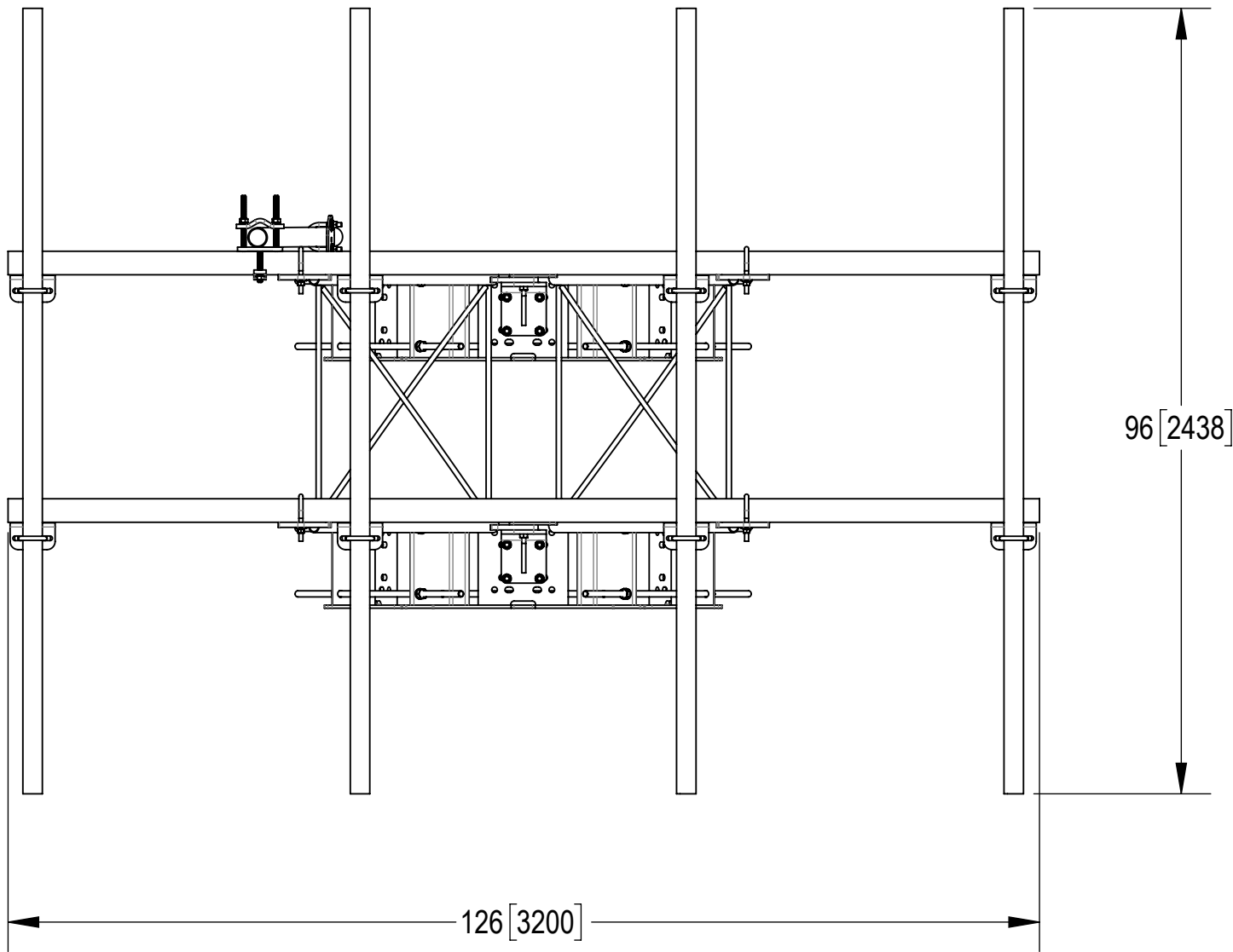
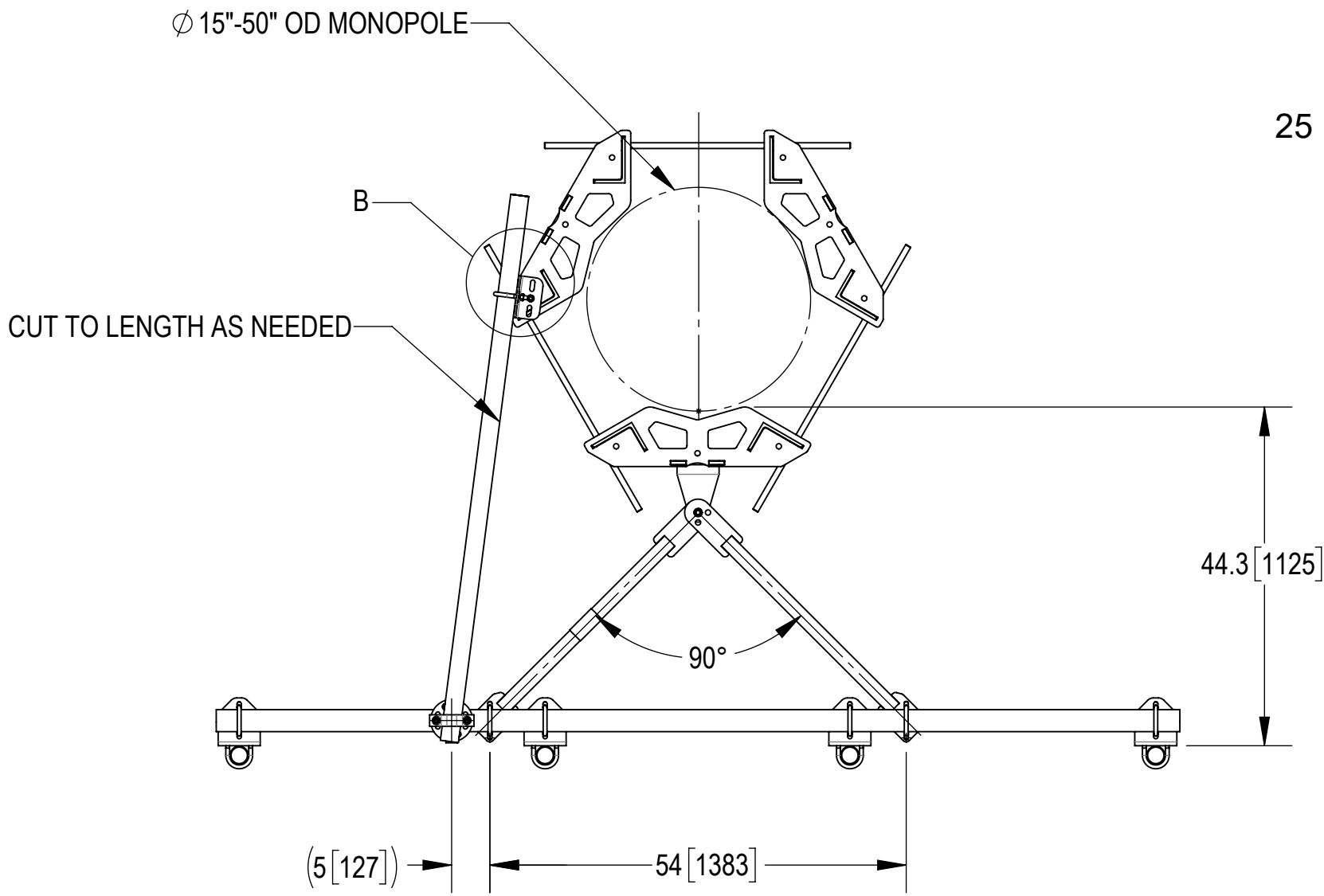
ALLOWABLE TIEBACK ANGLE

± 15 DEGREES VERTICAL
± 25 DEGREES HORIZONTAL



DETAIL B
SCALE 1 : 4

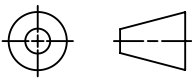
MCG21HD-10M-12-96 SHOWN FOR REFERENCE
(NOT ALL CONFIGURATIONS INCLUDE ALL ITEMS SEE NOTES IN TABLE ON SHEET 3)



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TITLE
SECTOR FRAME - MCG21HD

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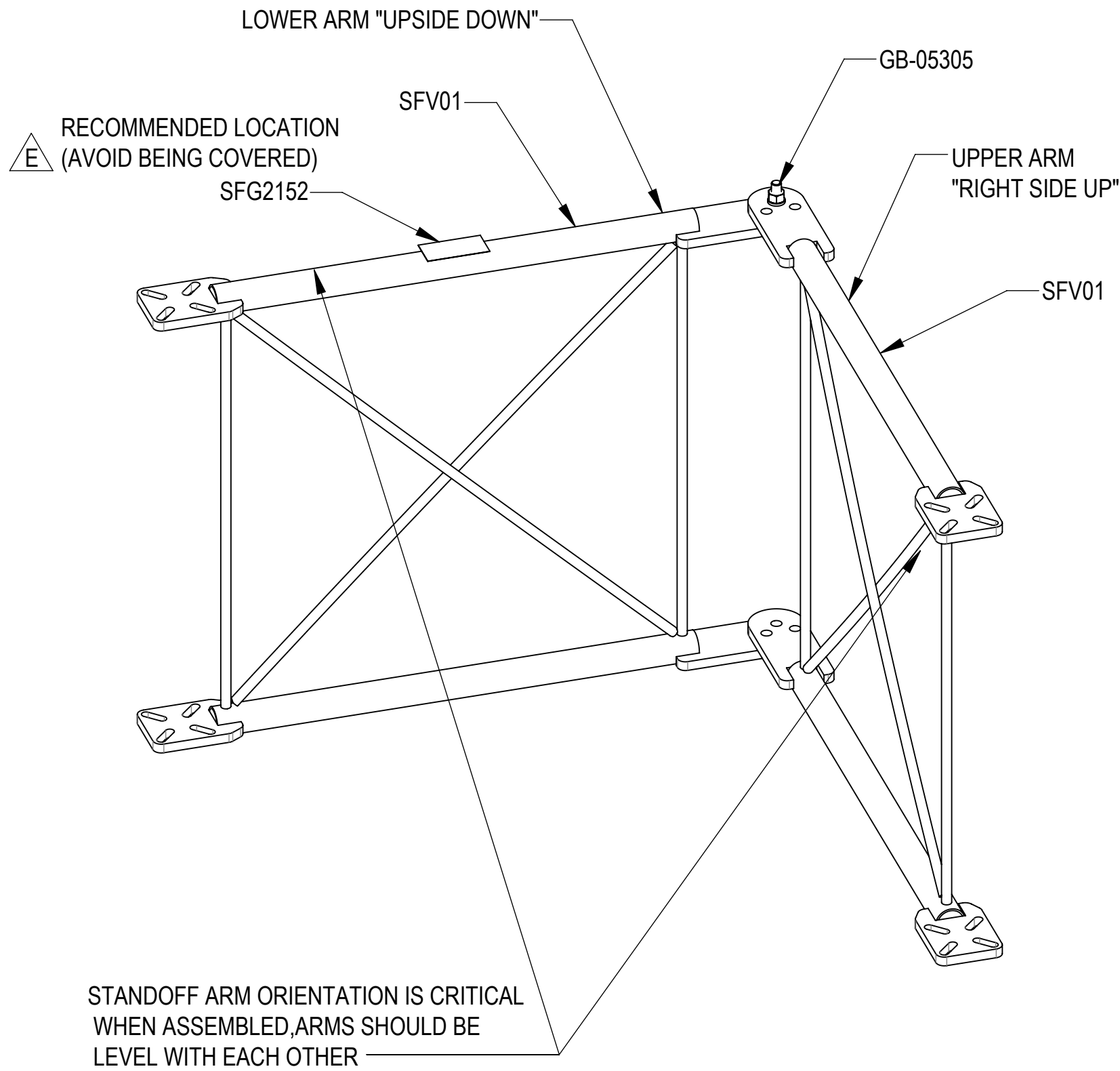


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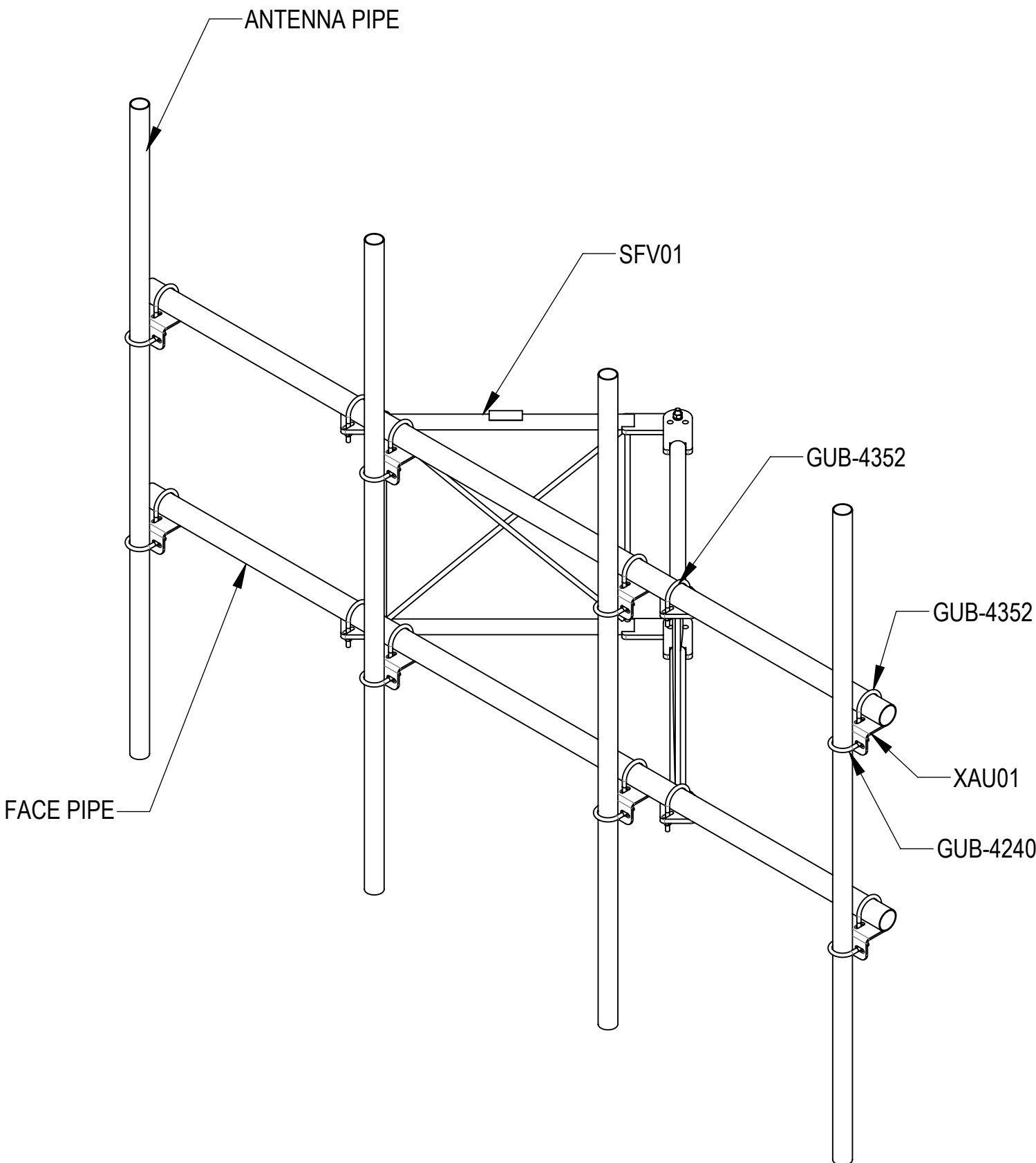
SHEET
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STEP 1: ATTACH STANDOFF ARMS (SFV01) USING (GB-05305) BOLT KITS. PLACE LABEL (SFG2152) ON TOP OF STANDOFF ARMS (SFV01) (WIPE GALVANIZED SURFACE WITH ALCOHOL CLEANER BEFORE APPLYING LABEL)



STEP 2: ATTACH FACE PIPES TO STANDOFF ARMS (SFV01) USING U-BOLTS (GUB-4352) AND THEN ATTACH ANTENNA PIPES TO FACE PIPES USING CROSSOVER ANGLES (XAU01) AND U-BOLTS (GUB-4240 AND GUB-4352)



TITLE
SECTOR FRAME - MCG21HD

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DOCUMENT NO.
MCG21HD



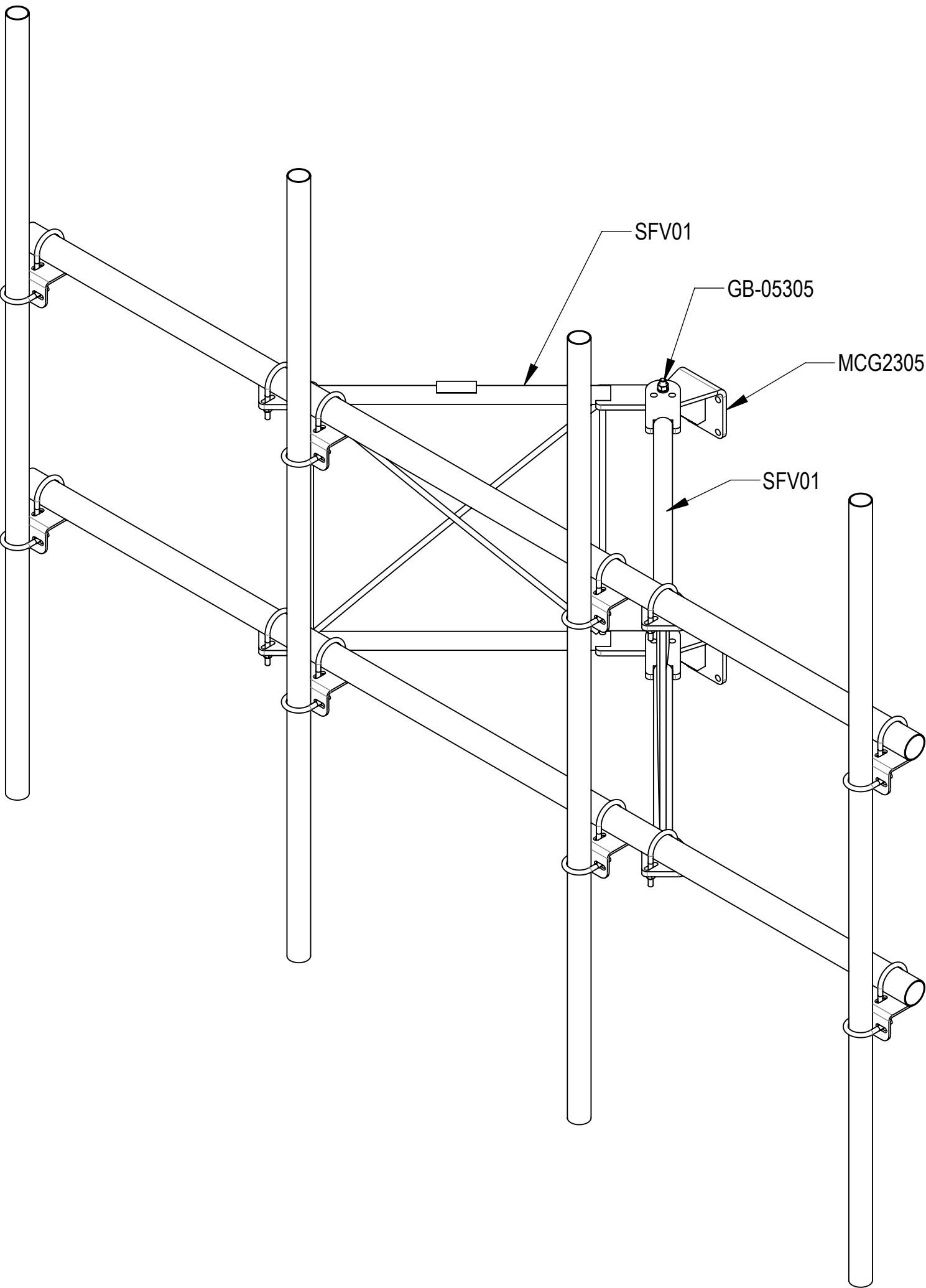
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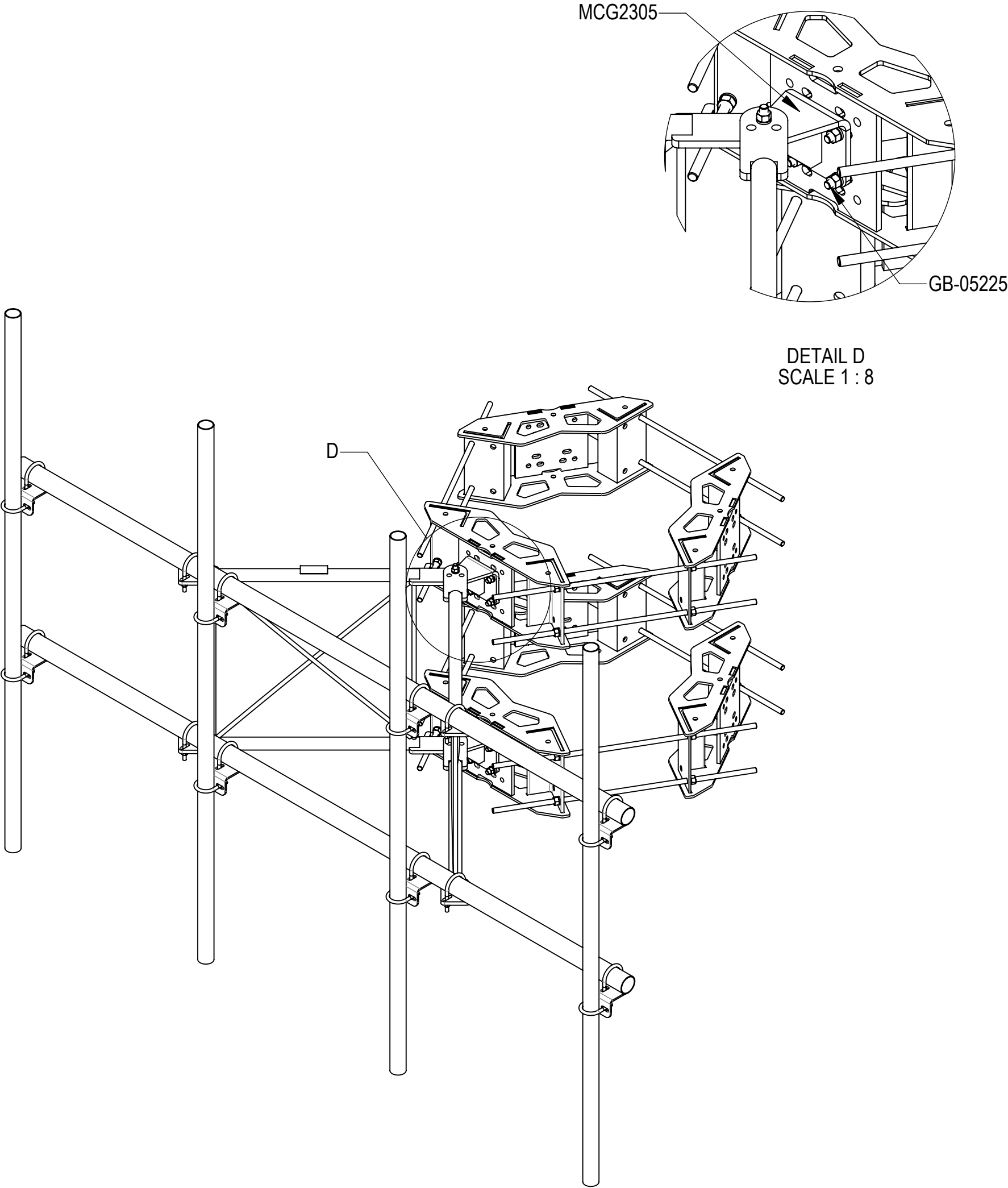
SHEET
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STEP 3: ATTACH BRACKETS (MCG2305) TO STANDOFF ARMS (SFV01) USING BOLT KITS (GB-05305)

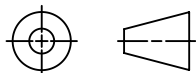


STEP 4: ATTACH BRACKETS (MCG2305) TO RINGMOUNTS USING BOLT KITS (GB-05225)



TITLE
SECTOR FRAME - MCG21HD

SIZE C	SCALE 1:24	DOCUMENT NO. MCG21HD
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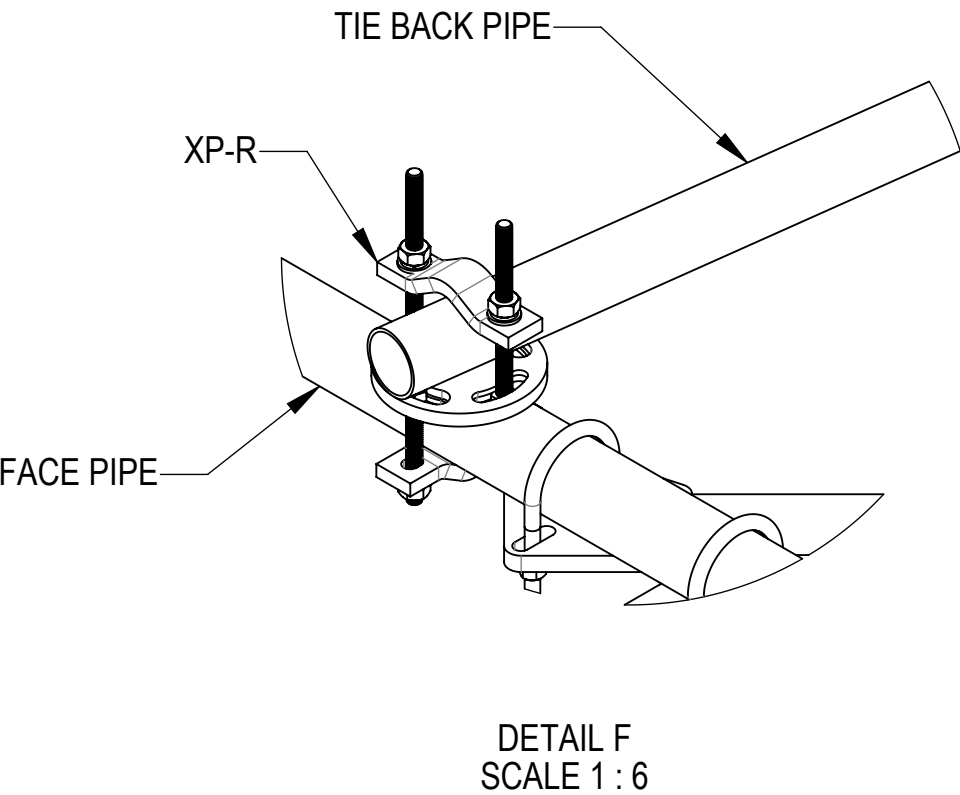
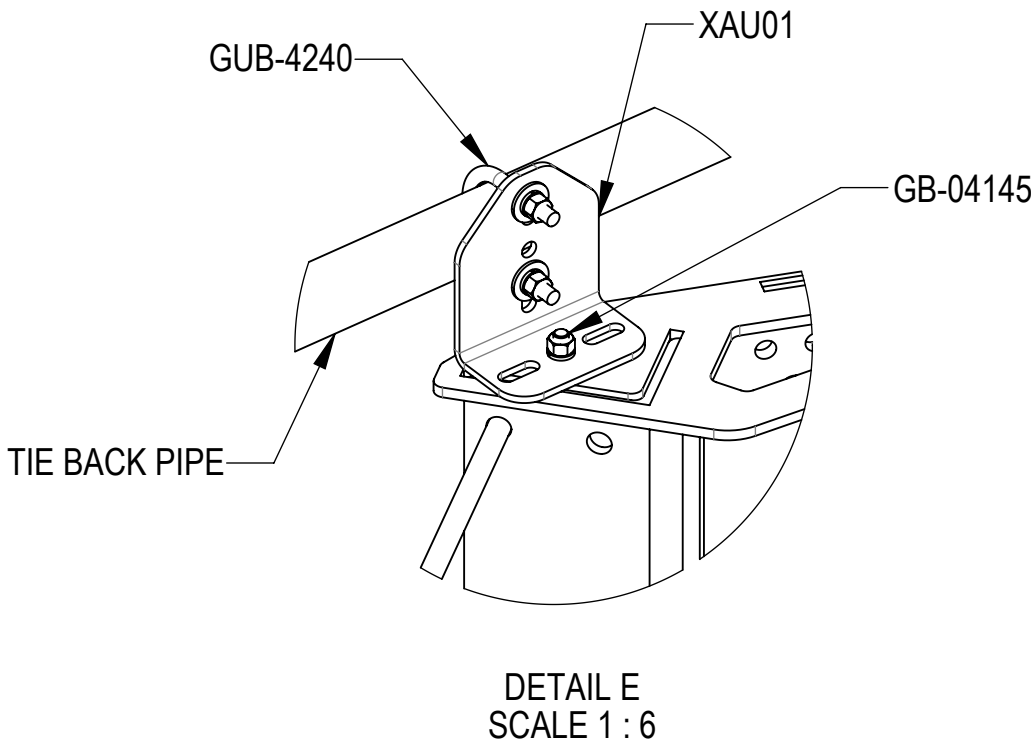
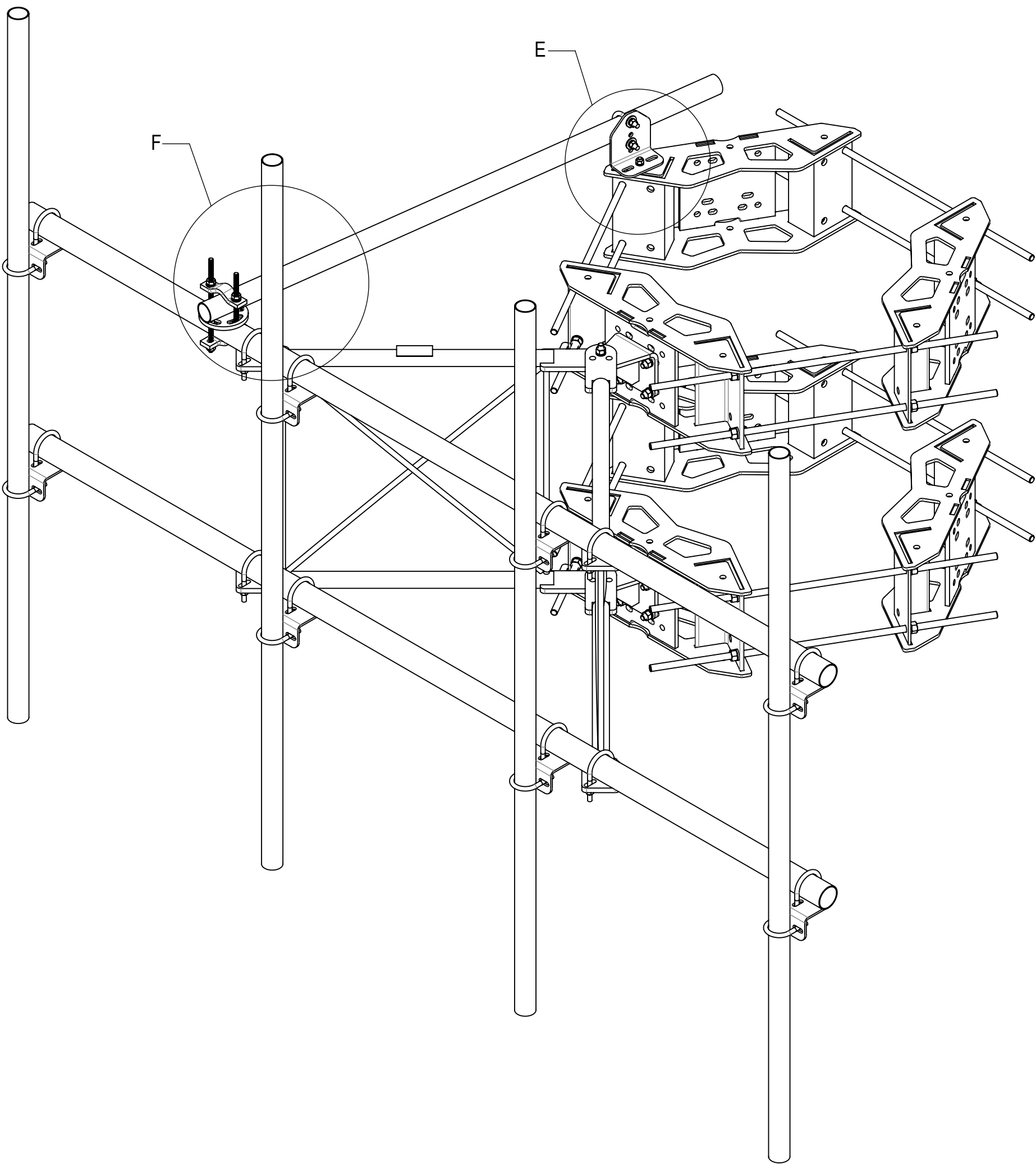


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STEP 5: ATTACH TIE BACK PIPES TO FACE PIPES USING ROUND CROSSOVER PLATE KITS (XP-R).



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TITLE SECTOR FRAME - MCG21HD				
SIZE C	SCALE 1:8	DOCUMENT NO. MCG21HD		
 		DRAWING		
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