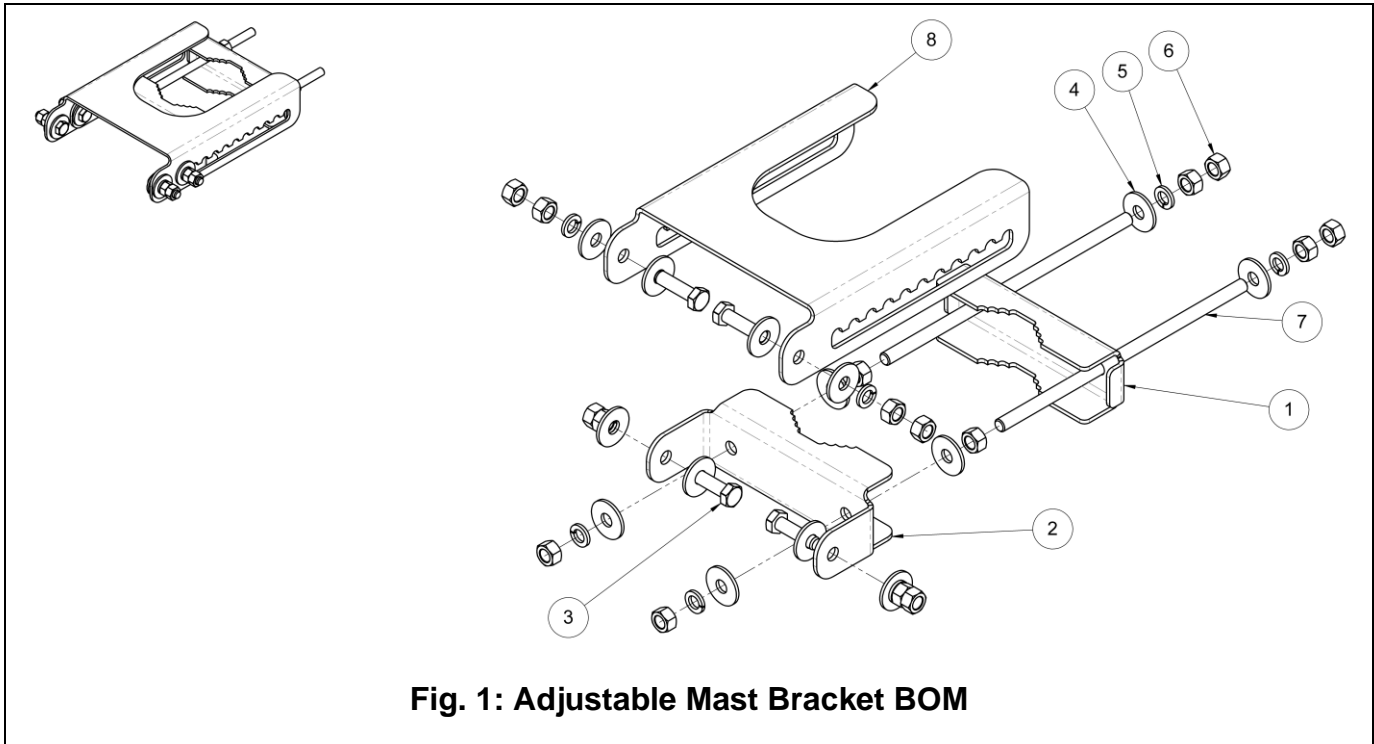


DISCLAIMER:

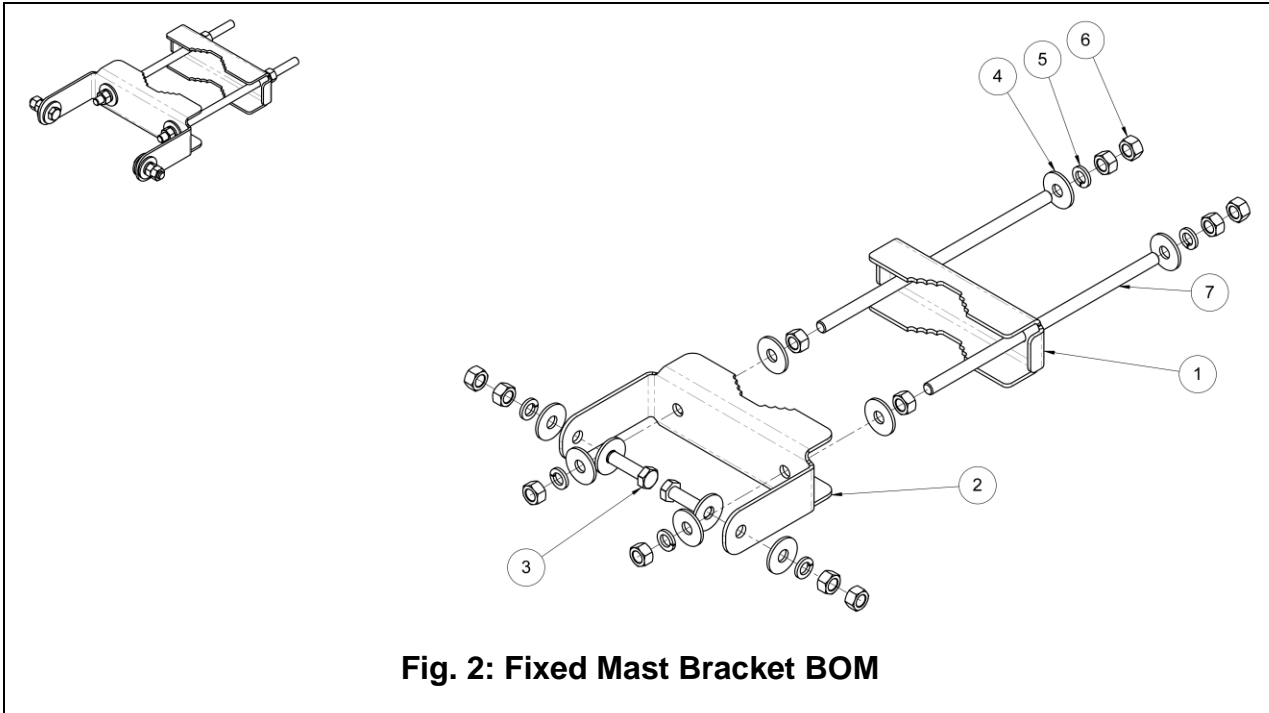
The installation, maintenance, or removal of an antenna requires qualified, experienced personnel. You must refer to the appropriate local safety codes and ensure proper electrical and electromagnetic compatibility before proceeding with the installation. All local codes shall take precedence over information in this document. Antenna systems should be inspected once a year by qualified personnel to verify proper installation, maintenance, and condition of equipment. Communication Components Antennas Inc. disclaims any liability or responsibility for the results of improper or unsafe installation.



ITEM	QTY	DESCRIPTION
1	1	CLAMP BRACKET, MBK-33
2	1	CLAMP BRACKET, ANTENNA, TILTED, MBK-33
3	4	SCREW, HEX, CAP, M12X1.75, 45L, DIN 933, CLASS 8.8, ROHS HOT DIP GALV
4	14	WASHER, FLAT, M12, 37 OD, MIN 2.3 THK, DIN 9021, STEEL, ROHS HOT DIP GALV
5	8	WASHER, SPLIT LOCK, M12, DIN 127B, STEEL, ROHS HOT DIP GALV
6	16	NUT, HEX, M12X1.75, DIN 934, CLASS 8, STEEL, ROHS HOT DIP GALV
7	2	THREADED ROD, M12X1.75, 300L, DIN 975, CLASS 8.8, ROHS HOT DIP GALV
8	1	MAST BRACKET, TILT, ADJUSTABLE

Step Task

- 1 Attach adjustable mast bracket to the top hinge for downtilt, or bottom hinge bracket for uptilt, as shown in Fig. 3 and Fig. 4. Refer to the materials list shown in Fig. 1 to properly identify the required items.

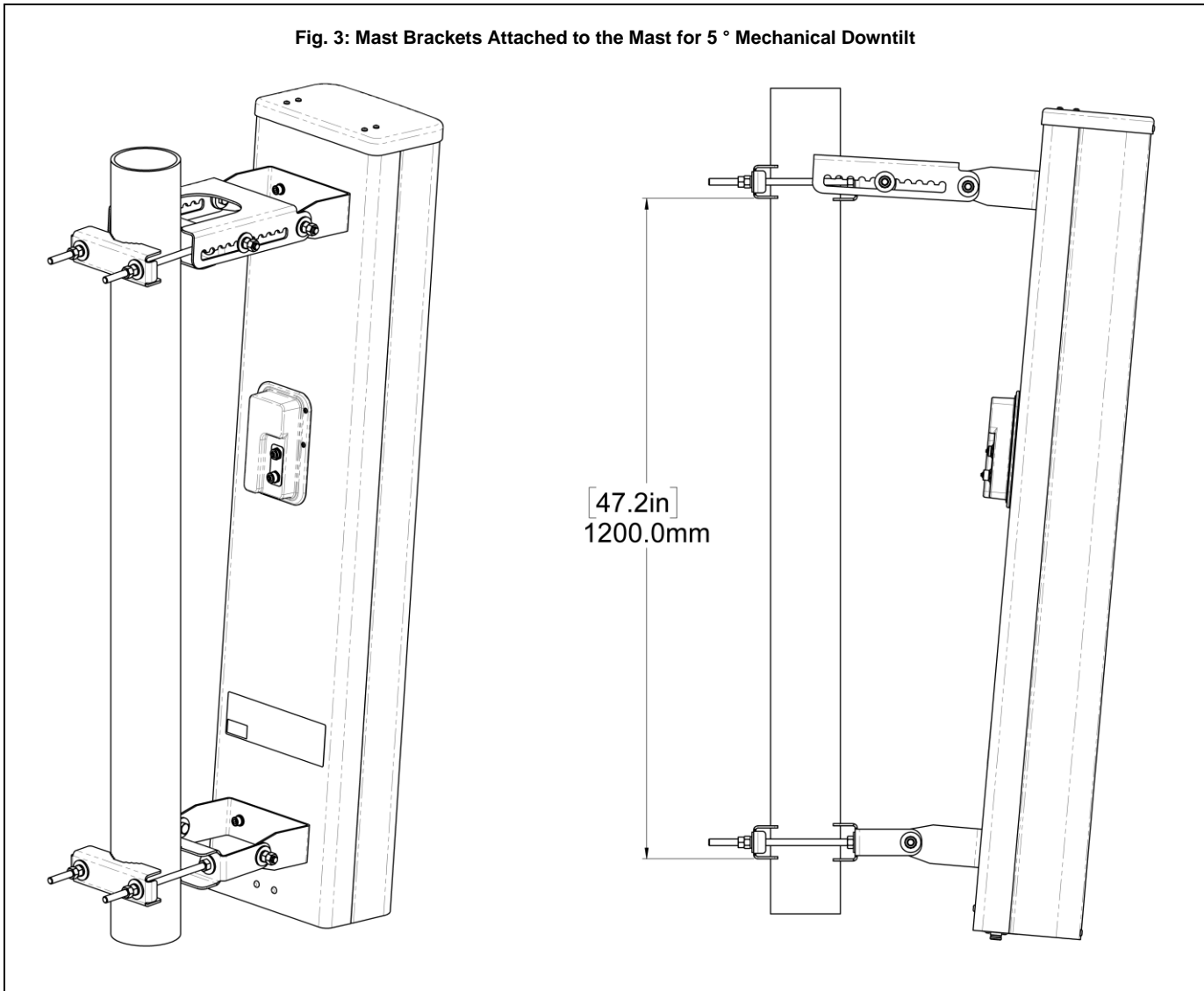


ITEM	QTY	DESCRIPTION
1	1	CLAMP BRACKET, MBK-33
2	1	CLAMP BRACKET, FIXED, MBK-33
3	2	SCREW, HEX, CAP, M12X1.75, 45L, DIN 933, CLASS 8.8, ROHS HOT DIP GALV
4	10	WASHER, FLAT, M12, 37 OD, MIN 2.3 THK, DIN 9021, STEEL, ROHS HOT DIP GALV
5	6	WASHER, SPLIT LOCK, M12, DIN 127B, STEEL, ROHS HOT DIP GALV
6	12	NUT, HEX, M12X1.75, DIN 934, CLASS 8, STEEL, ROHS HOT DIP GALV
7	2	THREADED ROD, M12X1.75, 300L, DIN 975, CLASS 8.8, ROHS HOT DIP GALV

Step Task

- 2 Attach the fixed mast bracket to the bottom hinge bracket for downtilt, or top hinge bracket for uptilt, as shown in Fig. 3 and Fig. 4. Refer to the materials list shown in Fig. 2 to properly identify the required items.

Fig. 3: Mast Brackets Attached to the Mast for 5 ° Mechanical Downtilt



Step	Task
3	Adjust the position of the threaded rod on the antenna side of brackets as required. Torque nuts to 54 N·m (40 ft-lbs).
4	Lift the antenna to the mast location to continue assembly.
5	Align the antenna in the direction specified by the site engineer. The orientation of the antenna is normal to the sector unless specifically required otherwise. The antenna is vertical at a 0° tilt setting. Increments 0 through 10 correspond to degrees of mechanical tilt as shown in Fig. 5.
6	Secure the antenna to the mast and torque all mounting fasteners to 54 N·m (40 ft-lbs. Refer to Antenna Installation Guide.

Fig. 4: Mast Brackets Attached to the Mast for 5 ° Mechanical Uptilt

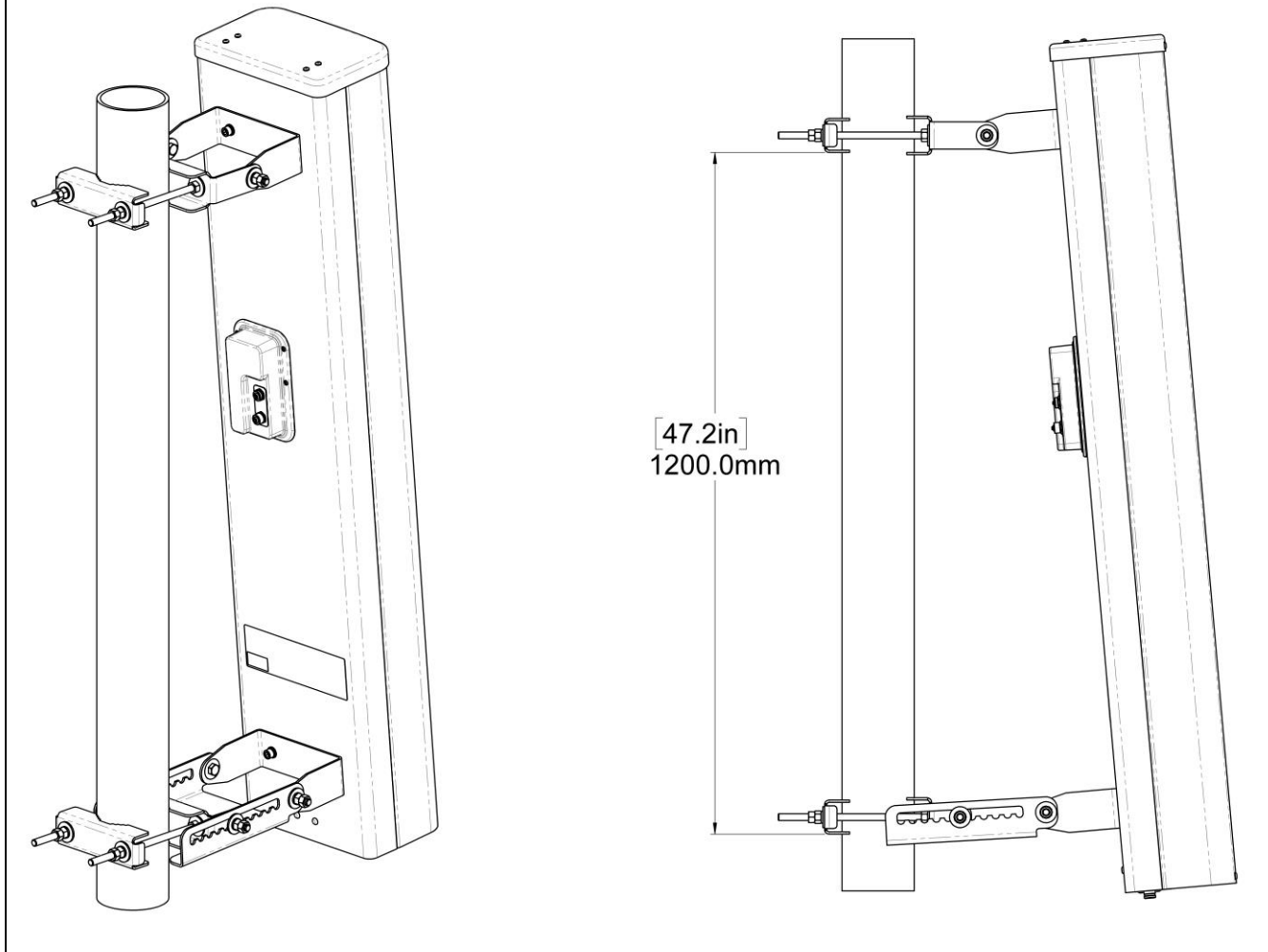


Fig. 5: Adjustable Mast Bracket Detail

