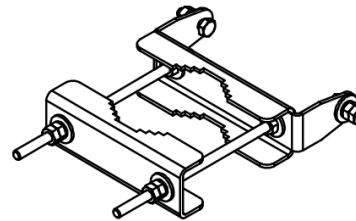


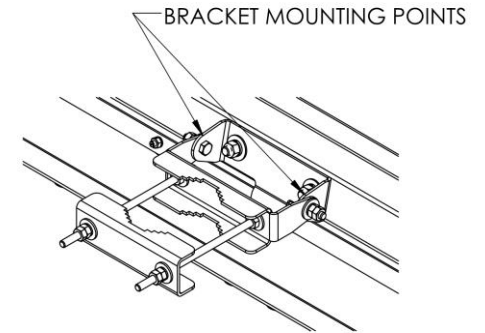
**Fig. 1: Adjustable Mast Bracket BOM**

ITEM	QTY	DESCRIPTION
1	2	MAST BRACKET, CLAMP
2	1	MAST BRACKET, HINGE, ADJUSTABLE, MBK-02
3	1	MAST BRACKET, HINGE, FIXED, MBK-02
4	1	ANTENA MAST BRACKET, TILT, ADJUSTABLE, MBK-03
5	4	THREADED ROD, M10X1.5, 250L, DIN 975, CLASS 8.8, ROHS HOT DIP GALV
6	6	SCREW, HEX, CAP, M10X1.5, 35L, DIN 933, CLASS 8.8, ROHS HOT DIP GALV
7	18	WASHER, FLAT, M10, 30 OD, MIN 2.3 THK, DIN 9021, STEEL, ROHS HOT DIP GALV
8	14	WASHER, SPLIT LOCK, M10, DIN 127B, STEEL, ROHS HOT DIP GALV
9	28	NUT, HEX, M10X1.5, DIN 934, CLASS 8, STEEL, ROHS HOT DIP GALV

**Fig. 2: Fixed Mast Bracket**



**Fig. 3: Fixed Mast Bracket Attached To Antenna**



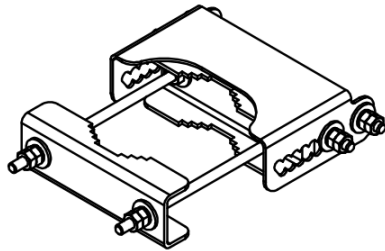
**Step Task**

- 1 Attach the fixed mast bracket to the bottom mounting brace for downtilt, or top mounting brace for uptilt, as shown in Fig. 2 and 3. Refer to the materials list shown in Fig. 1 to properly identify the required items.

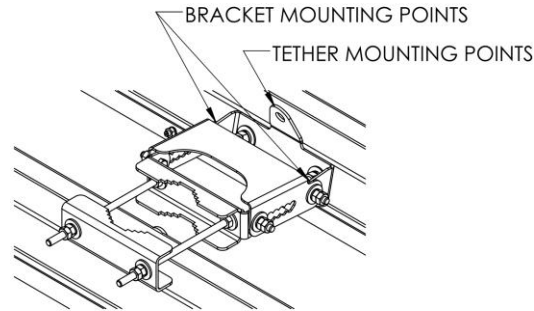
**DISCLAIMER:**

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.

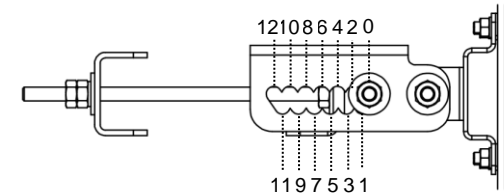
**Fig. 4: Adjustable Mast Bracket**



**Fig. 5: Adjustable Mast Bracket Attached To Antenna**



**Fig. 6: Detail Of Adjustable Tilt Bracket**



Step	Task
2	Attach the adjustable mast bracket to the top mounting brace for downtilt, or bottom mounting brace for uptilt, as shown in Fig. 4 and 5. Refer to the materials list to properly identify the required items.
3	Adjust the position of the threaded rod on the antenna side of brackets as required. Torque nuts to 20 N·m (15 ft-lbs).
4	For ease of assembly, set the adjustable bracket to the desired tilt angle and hand tighten fasteners while antenna is on the ground (before lifting and fastening the antenna to the mast).

Step	Task
5	Lift the antenna up to the mast location to continue assembly. Refer to Antenna Installation Guide for additional instructions and precautions.
6	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 12 correspond to degrees of mechanical tilt as shown in Fig. 6. For the mechanical tilt angle to be accurate, ensure that the clamps on the mast are spaced 13.0° (33 cm) center-to-center.
7	Secure the antenna to the mast and torque all mounting fasteners to 20 N·m (15 ft-lbs).
8	Antenna tethers (supplied by the customer) may be attached to the tether mounting points included on the top and bottom brackets on some antenna models as shown in Fig. 5.

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