

**639845-1 Revision D. April 2021**

## Side-By-Side Mounting Kit

**BSAMNT-SBS-2-2**

### GENERAL INFORMATION

- The BSAMNT-SBS-2-2 Mounting Kit allows mounting either two 350mm wide or two 457mm wide antennas with 2 mount points side by side. Please visit the product page of this mounting kit on the CommScope webpage for a list of antennas which are supported by this bracket.
- Mounting systems for cylindrical pipe installations [60-115 mm ( 2.4"-4.5" ) pipe diameter] for heavy duty applications.

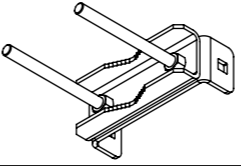
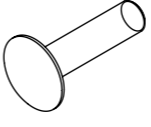

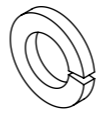
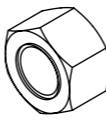
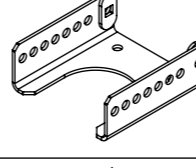
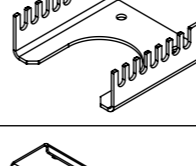
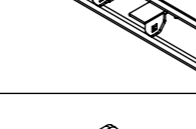
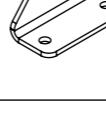
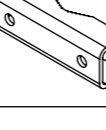
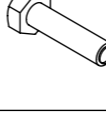


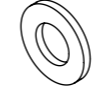
### PRE-INSTALLATION INSTRUCTIONS

- Thoroughly read the directions included in this bulletin before starting to assemble parts.
- Carefully unpack all parts from the shipping boxes. Examine kit to ensure that all parts are enclosed and that there is no physical damage.
- Check to ensure that the antenna feed connector mates with the jumper cable.
- Verify that frequency range shown on the label on the back of the antenna matches the frequency range of the station equipment.
- Position the antennas so that the drain holes are directed down toward the ground.

### TORQUE

BOLT DIAMETER	TORQUE
M10	
M16	

### PARTS LIST

ITEM NO.	DESCRIPTION	QTY.	IMAGE
1	PIPE MOUNTS	2	
3	BOLT,CARRIAGE,M16X65,STL,GALV	6	
4	WSHR,FLT,M16,17X30X3,STL,GALV	10	
5	WSHR,LK,SPLT,M16,STL,GALV	10	
6	NUT,HEX,M16,STL,GALV	20	
7	ARM WITH WELDING, TOP	1	
8	ARM, COVER, DEG TILT, TOP	1	
10	PLATE, BRACKET	2	
11	LINKAGE, BRACKET	8	
12	MOUNTING BRACKET, BACK, GALV	2	
13	SCR,HCS,HEX,M10X40,STL,GALV	24	
14	WSHR,LK,SPLT,M10,STL,GALV	24	
15	NUT,HEX,M10,STL,GALV	48	
16	WSHR,FLAT,M10,10.5X20X2,STL,GALV	24	



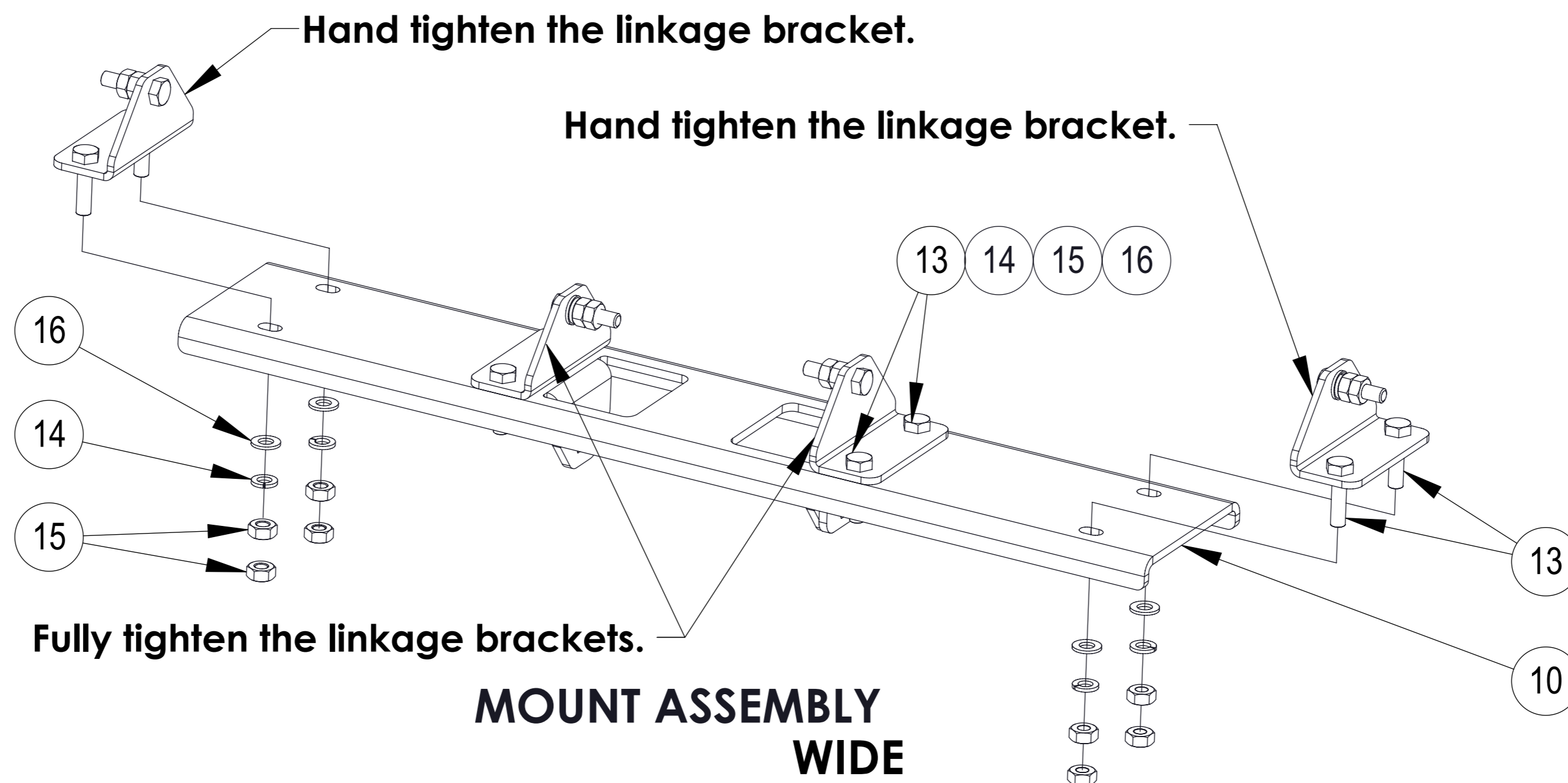
All fasteners must be tightened to the defined torque value after onsite installation to the specified tilt position, including installation at 0-degree, see the mounting kit installation diagrams on the following pages for the correct torque recommendations.

(continued on page 2)

(Continued from page 1)

Step 1: Hand tighten the linkage bracket (ITEM 11) onto plate bracket (Item 10) using M10 screws, lock washers, flat washer and nuts (Items 13, 14, 16 & 15).

**The direction of linkage brackets (Item 11) is different from 457mm wide.**

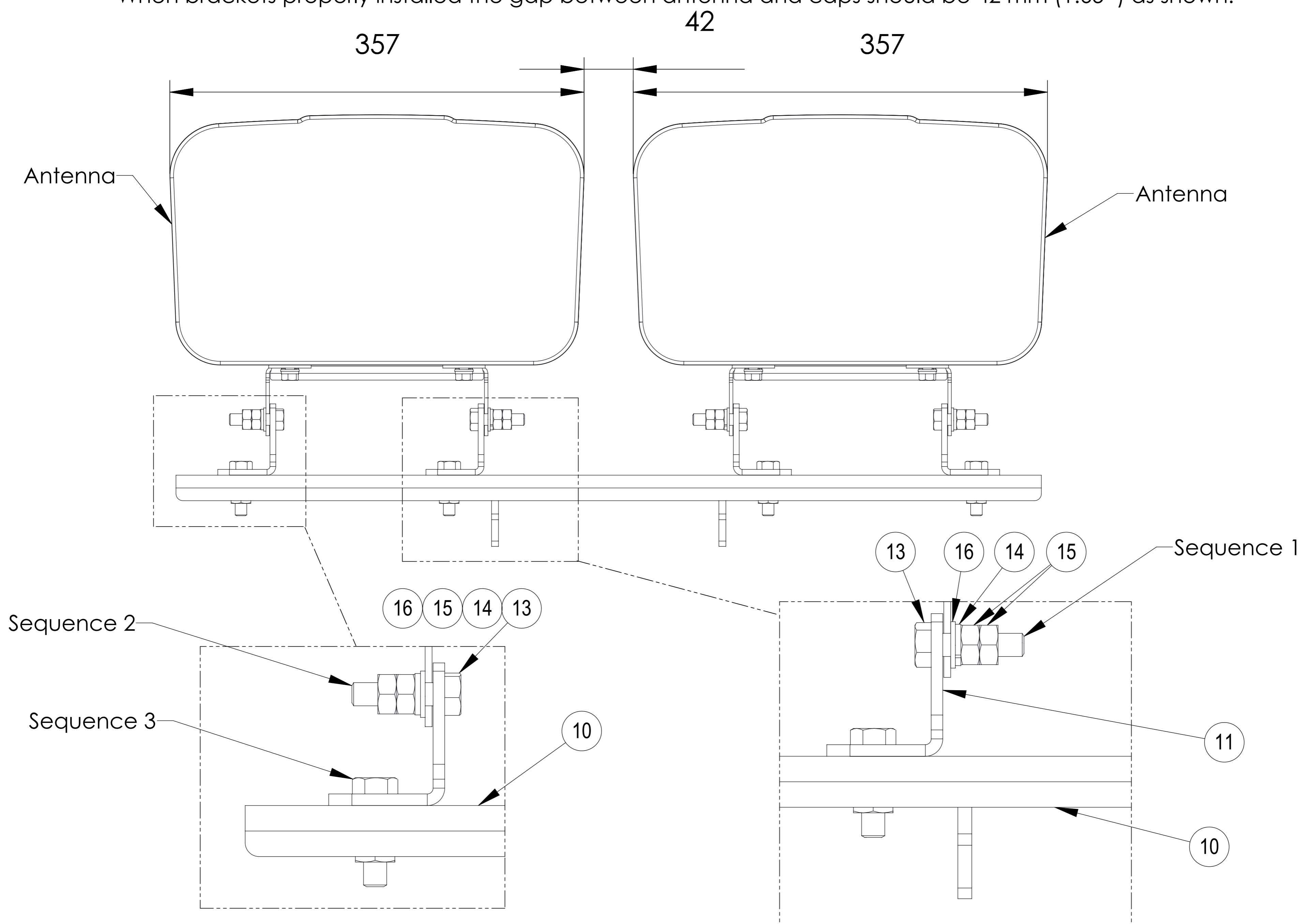


Step 2: Keep the antenna parallel.

- (1) Assemble an antenna on the middle linkage bracket (ITEM 11) using M10 screws, lock washers, flat washers and nuts (ITEMS 13, 14, 16 & 15). Hand tighten these nuts (ITEM 15). See sequence 1.
- (2) Assemble the antenna on the side linkage bracket (ITEM 11) using M10 screws, lock washers, flat washers and nuts (ITEMS 13, 14, 16 & 15). Hand tighten these nuts (ITEM 15). See sequence 2.
- (3) Repeat the sequences 1 & 2 to install another antenna.
- (4) Fully tighten all nuts.

After top bracket plate is installed, repeat step 2 for the bottom bracket plate.

When brackets properly installed the gap between antenna and caps should be 42 mm (1.65") as shown.



### BSAMNT-SBS-2-2 KIT

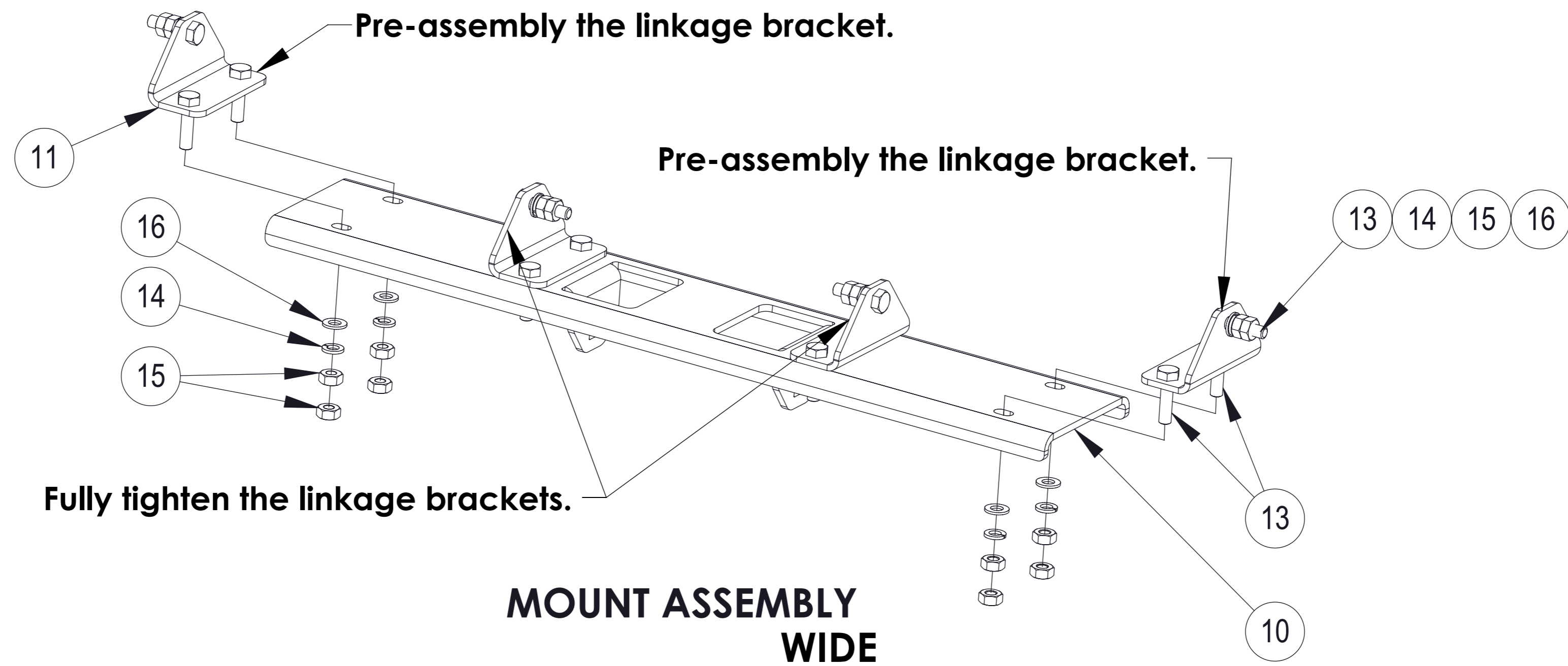
BOLT DIAMETER	TORQUE
M10	

(continued on page 3)

(Continued from page 2)

Step 1: Hand tighten the linkage bracket (ITEM 11) onto plate bracket (Item 10) using M10 screws, lock washers, flat washer and nuts (Items 13, 14, 16 & 15).

**The direction of linkage brackets (Item 11) is different from 350mm wide.**



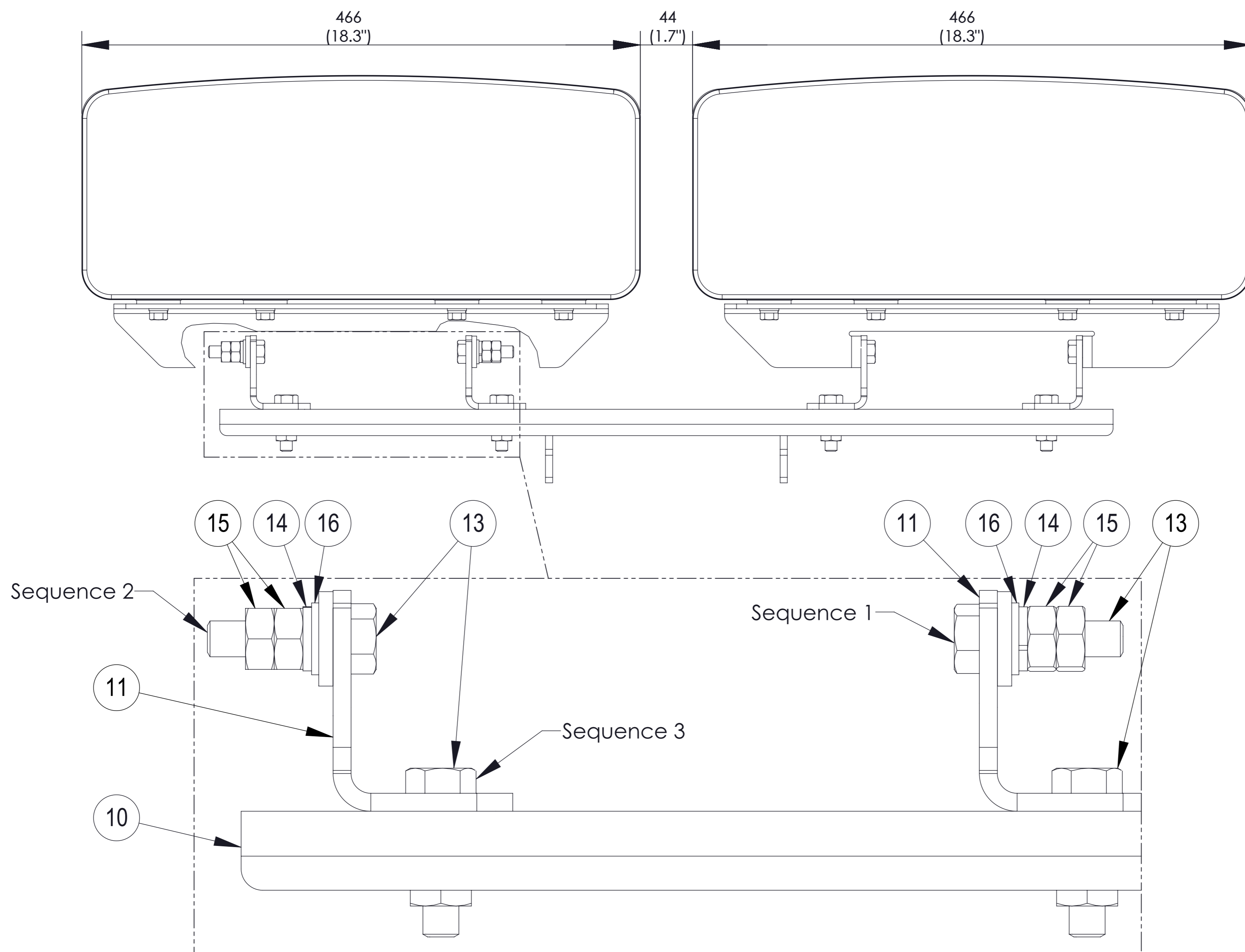
Step 2: Keep the antenna parallel.

- (1) Assemble an antenna on the middle linkage bracket (Item 11) using M10 screws, lock washers, flat washers and nuts (Items 13, 14, 16 & 15). Hand tighten these nuts (Item 15). See sequence 1.
- (2) Assemble the antenna on the side linkage bracket (Item 11) using M10 screws, lock washers, flat washers and nuts (Items 13, 14, 16 & 15). Hand tighten these nuts (Item 15). See sequence 2.
- (3) Repeat the sequences 1 & 2 to install another antenna.
- (4) Fully tighten all nuts.

Torque value for M10 fasteners is 37 N.m ( 27 ft. lbs )

After top bracket plate is installed, repeat step 2 for the bottom bracket plate.

When brackets properly installed the gap between antenna and caps should be 44 mm ( 1.7 " ) as shown.



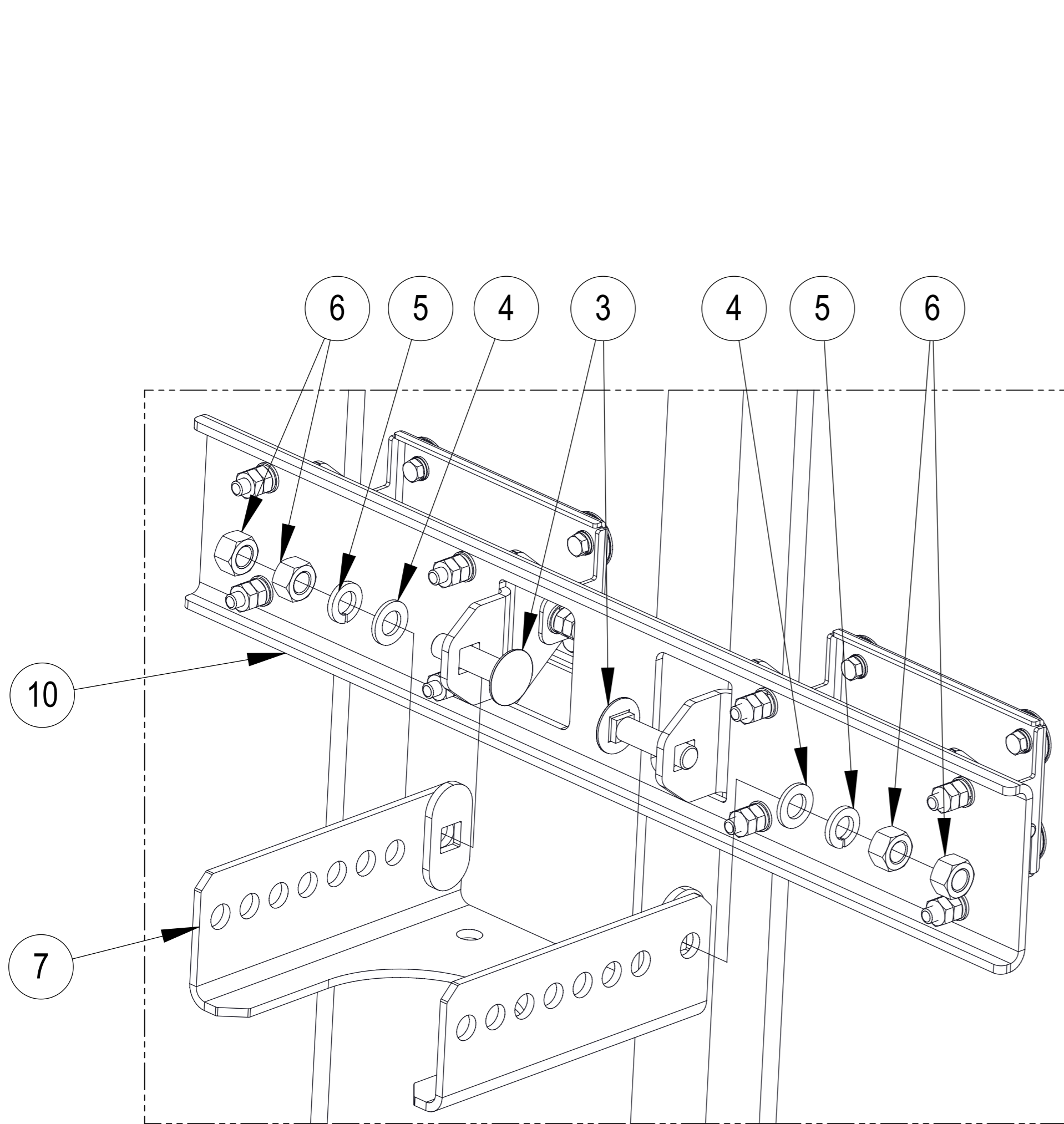
### BSAMNT-SBS-2-2 KIT

BOLT DIAMETER	TORQUE
M10	

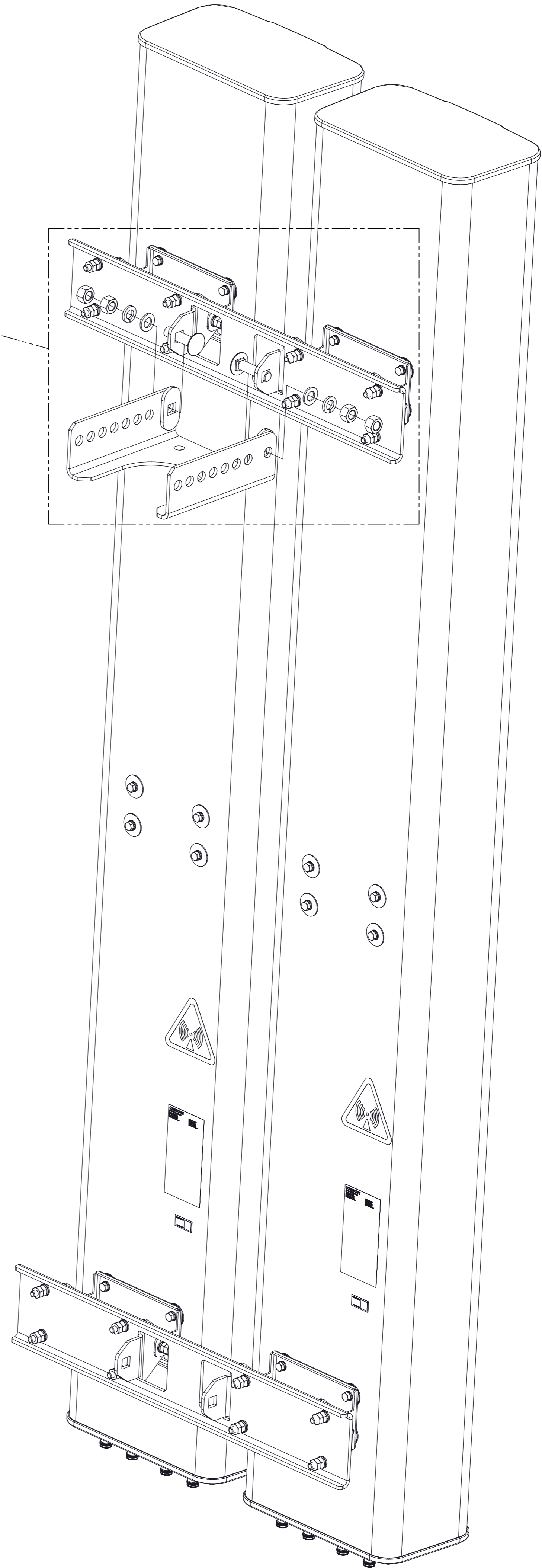
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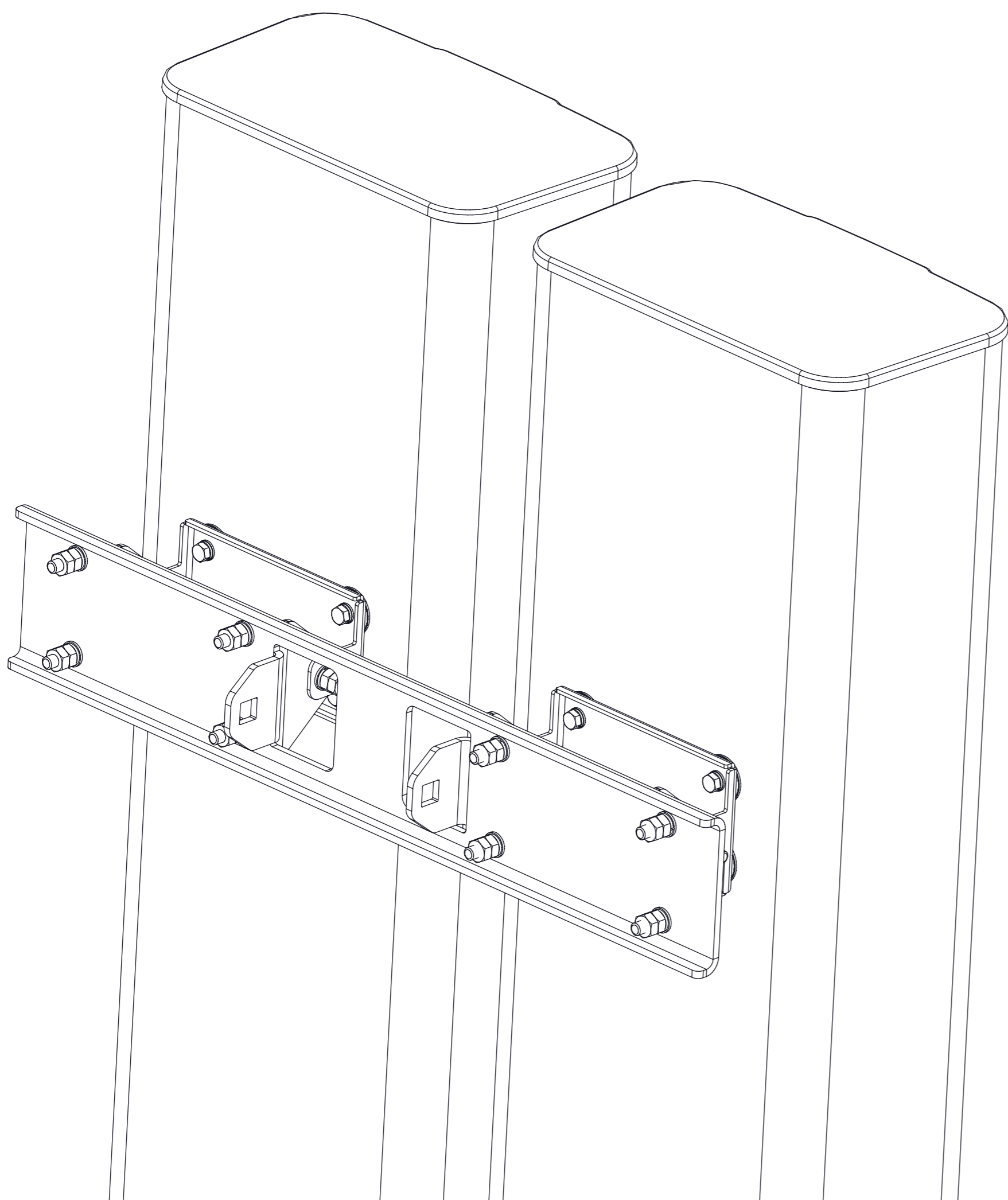
1. Attach top arm with welding (Item 7) to top bracket plate (Item 10) using M16 carriage bolt (Item 3), flat washer, lock washer and M16 nut (Items 4, 5 & 6). Hand tighten them on 2 places. The top arm with welding and carriage bolt (Items 7 & 3) won't be installed if the antenna is 0 deg downtilt. See 0 degree tilt view as illustrated on sheet 9.



**Mount Assembly, Top  
Explode view**



**BSAMNT-SBS-2-2 KIT**



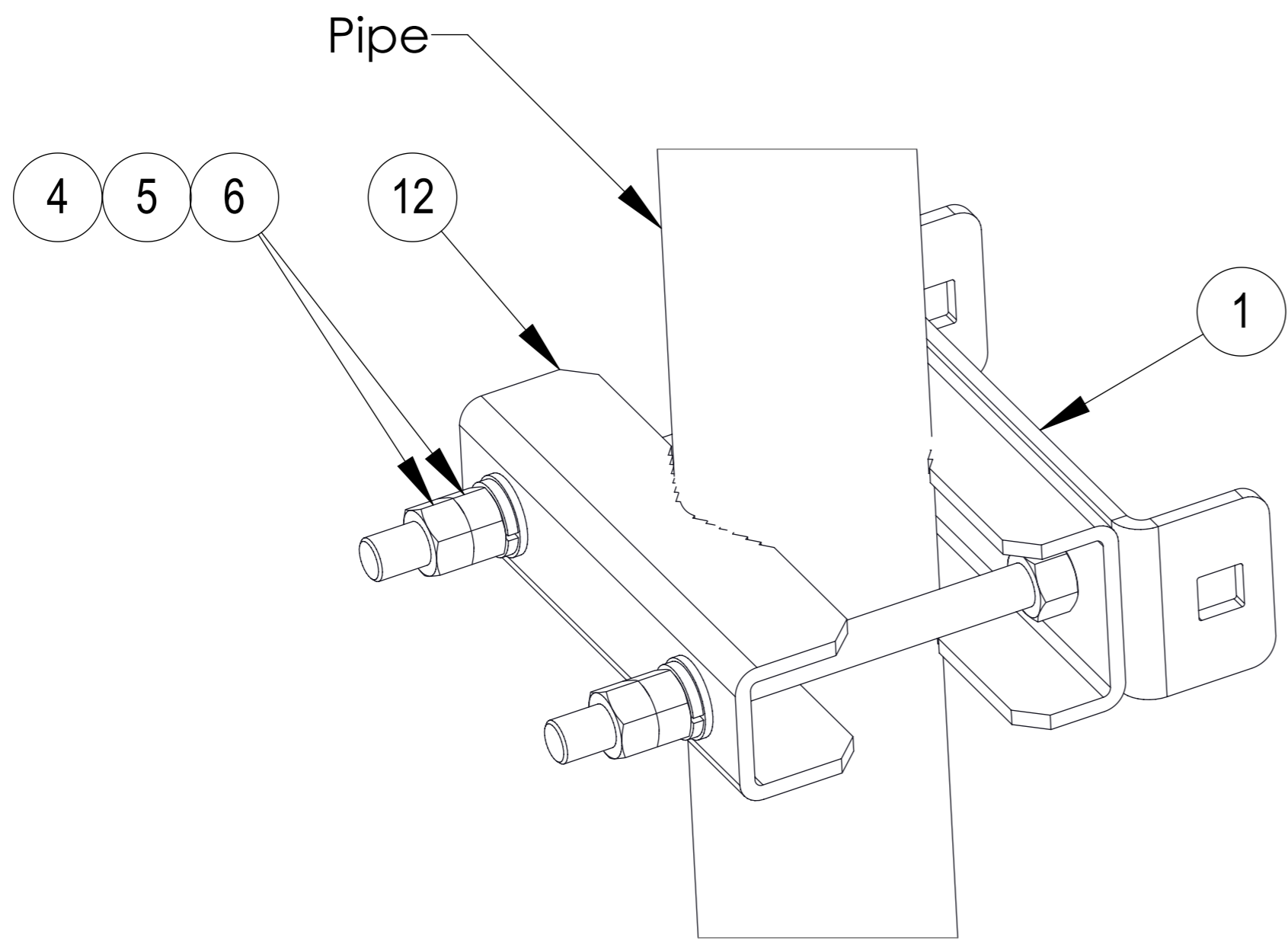
**0 DEGREE TILT VIEW**

(continued on page 5)

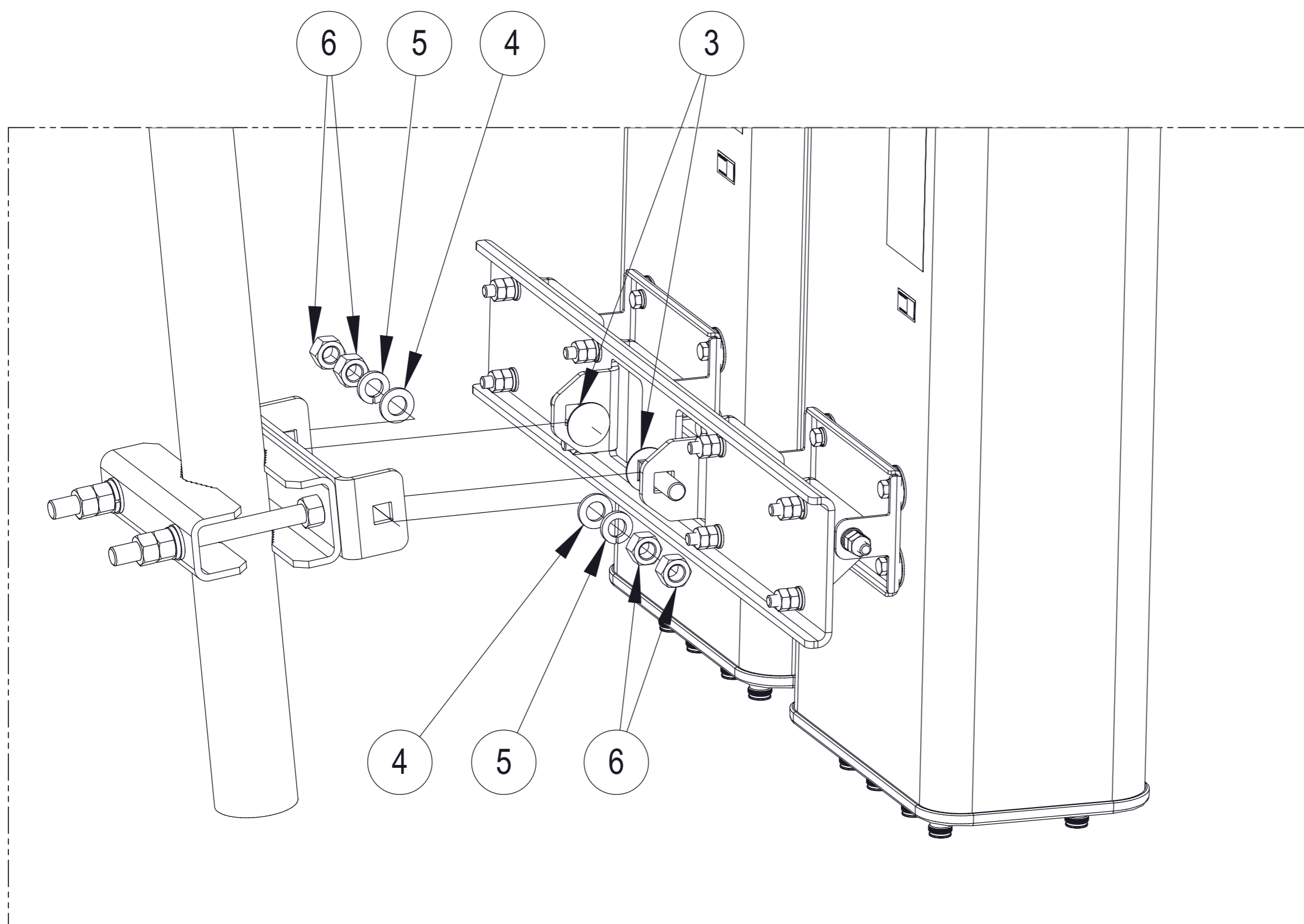
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2. Attach mount assembly, bottom to the mounting bracket, bottom as shown.

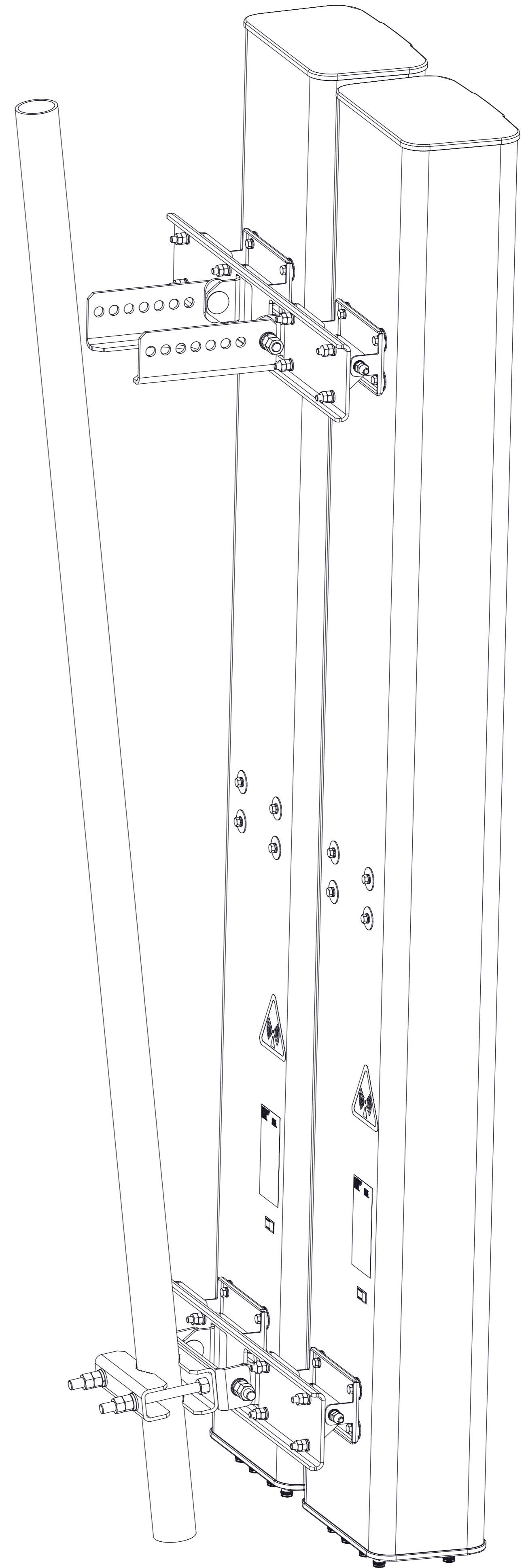
Step 1: **Secure pipe mounts (Item 1) and mounting bracket (Item 12) on pipe using flat washer, lock washer and M16 nut (Items 4, 5 & 6).**



Step 2: **Secure antenna with plate (Item 10) on pipe mounts (Item 1) using M16 carriage bolt (Item 3), flat washer, lock washer and M16 nut (Items 4, 5 & 6). Hand tighten them on 2 places.**



**Mount Assembly, Bottom  
Explode view**



**BSAMNT-SBS-2-2 KIT**

BOLT DIAMETER	TORQUE
M16	

(continued on page 6)

(Continued from page 5)

- Secure pipe mounts (Item 1) and mounting bracket (Item 12) on pipe using flat washer, lock washer and M16 nut (Items 4, 5 & 6). Torque value for M16 fasteners is 96 N.m (71 ft. lbs)

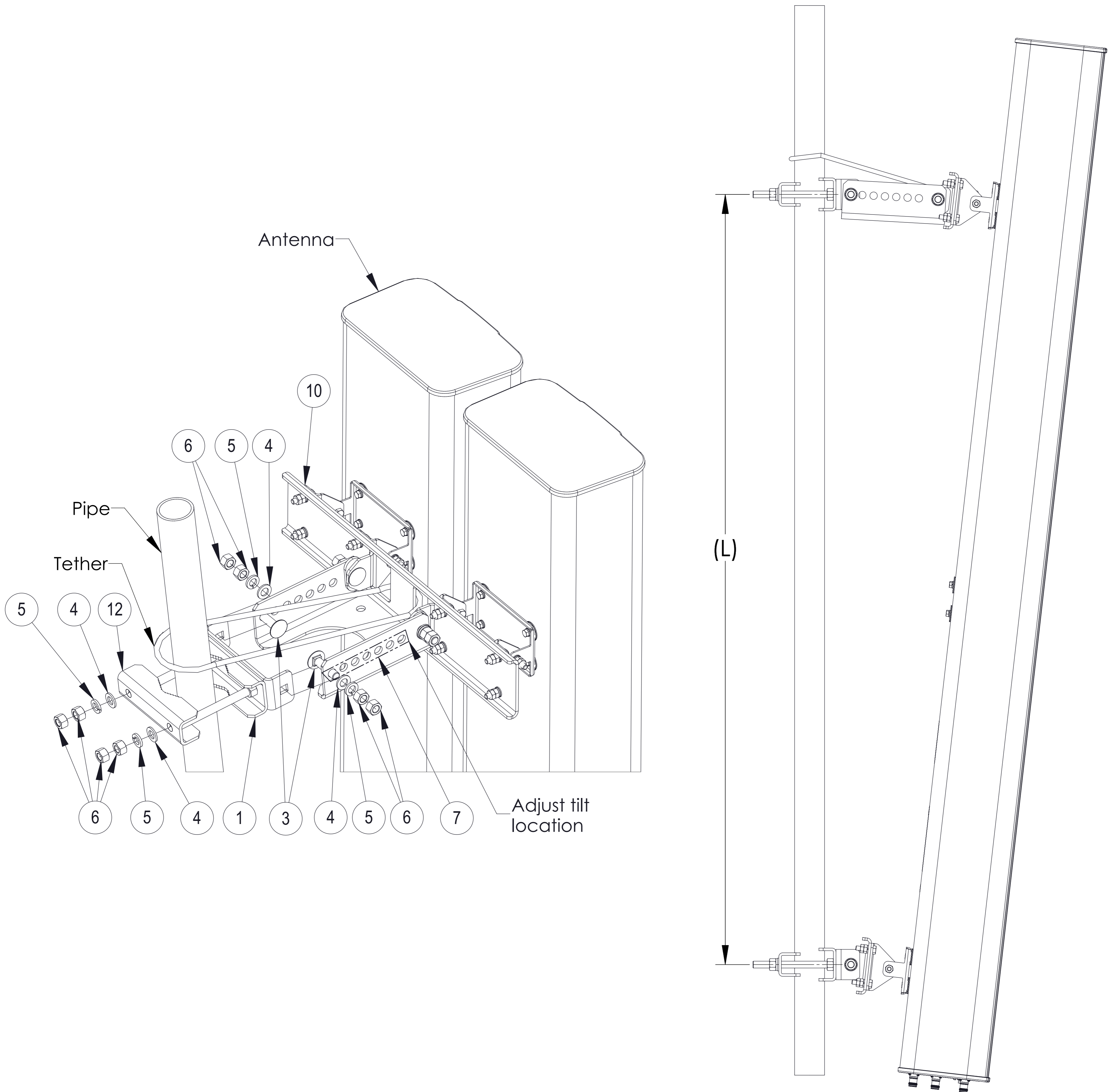
Secure antenna with plate (Item 10) and arm (Item 7) on pipe mounts (Item 1).

- Use a tether to secure the antenna hoisting eye to the mounting structure on the top side.
- Use M16 carriage bolt (Item 3) and flat washer, lock washer, M16 nut (Items 4, 5, & 6).
- Adjust the correct tilt and use M16 carriage bolt (Item 3) and flat washer, lock washer & M16 nut (Items 4, 5 & 6).
- Hand tighten M16 nuts (Item 6).

**Make sure the distance "L" = The distance between mounting plates on the antenna.**

**Note**

The tether can be a rope, wire rope, chain or similar material.  
 The tether should be short enough to prevent the antenna from tilting beyond its maximum downtilt range.  
 This will prevent the antenna from tilting away from the mounting structure when the adjusting bolts are removed.



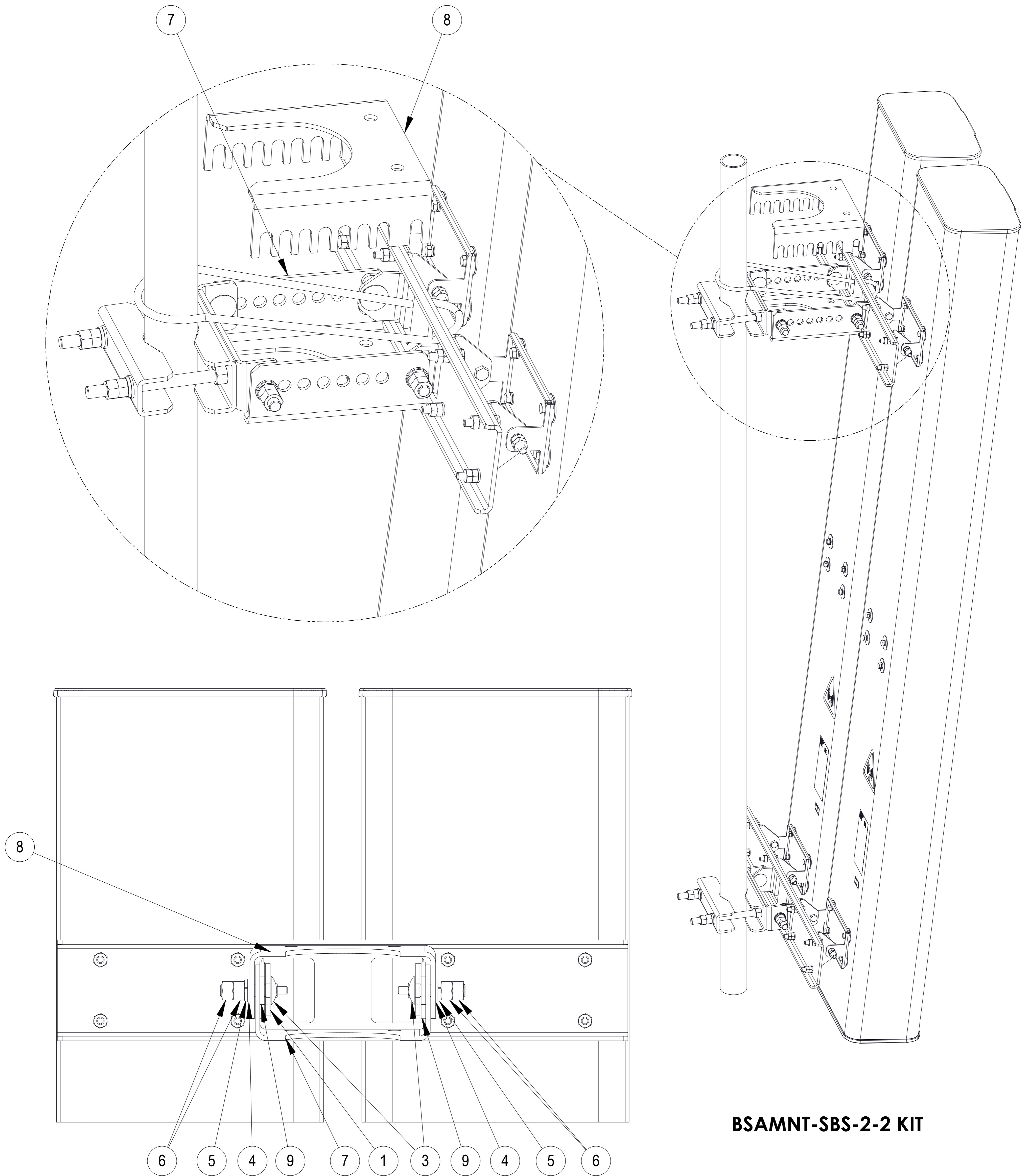
**BSAMNT-SBS-2-2 KIT**

BOLT DIAMETER	TORQUE
M16	

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(Continued from page 6)

4. Install arm, cover (Item 8) onto top arm with welding (Item 7).  
**Fully tighten all M16 nuts (Item 6).**



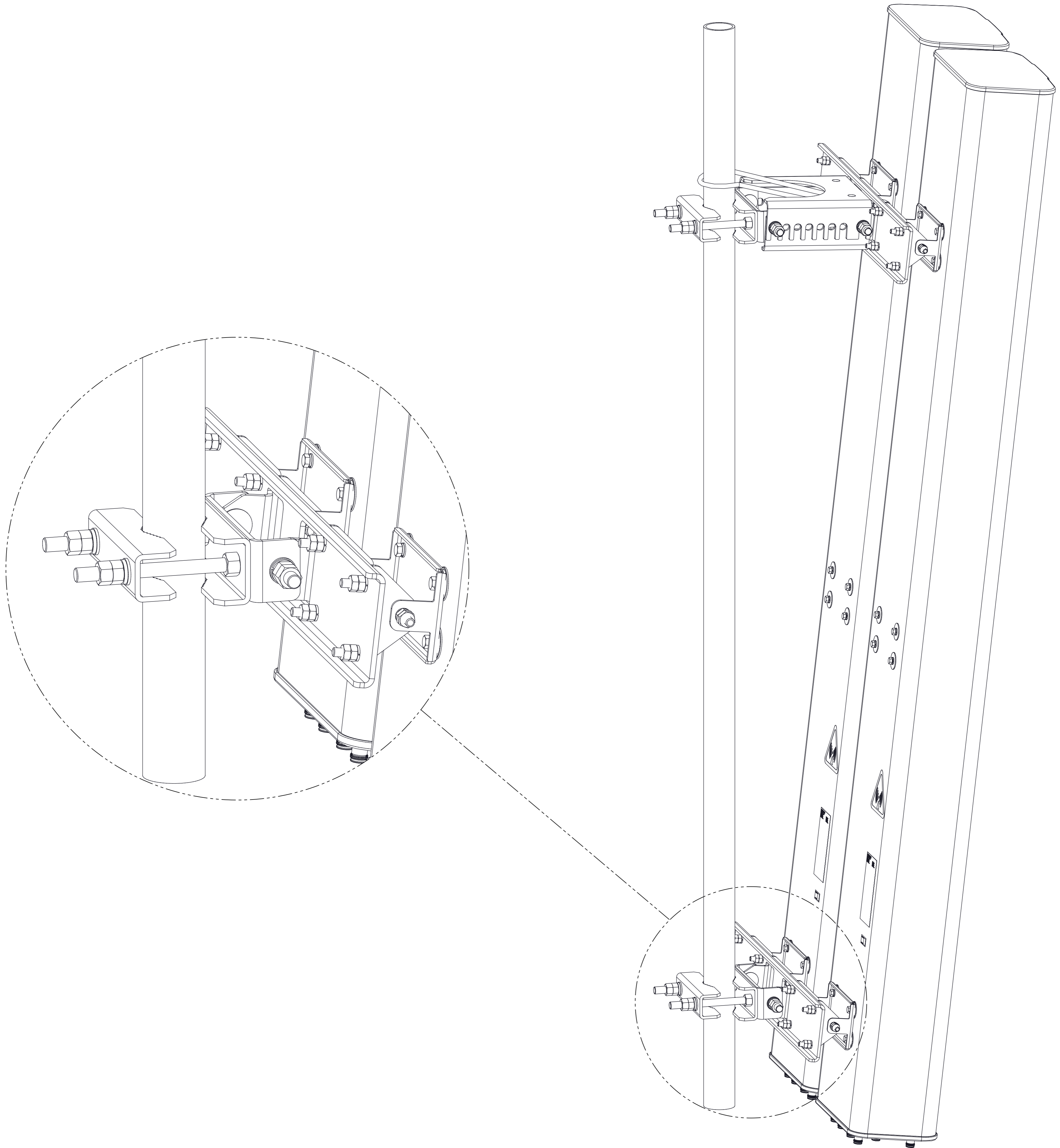
**BSAMNT-SBS-2-2 KIT**

BOLT DIAMETER	TORQUE
M16	

(continued on page 8)

(Continued from page 7)

5. Fully tighten all M16 nuts (Item 6).



**BSAMNT-SBS-2-2 KIT**

BOLT DIAMETER	TORQUE
M16	

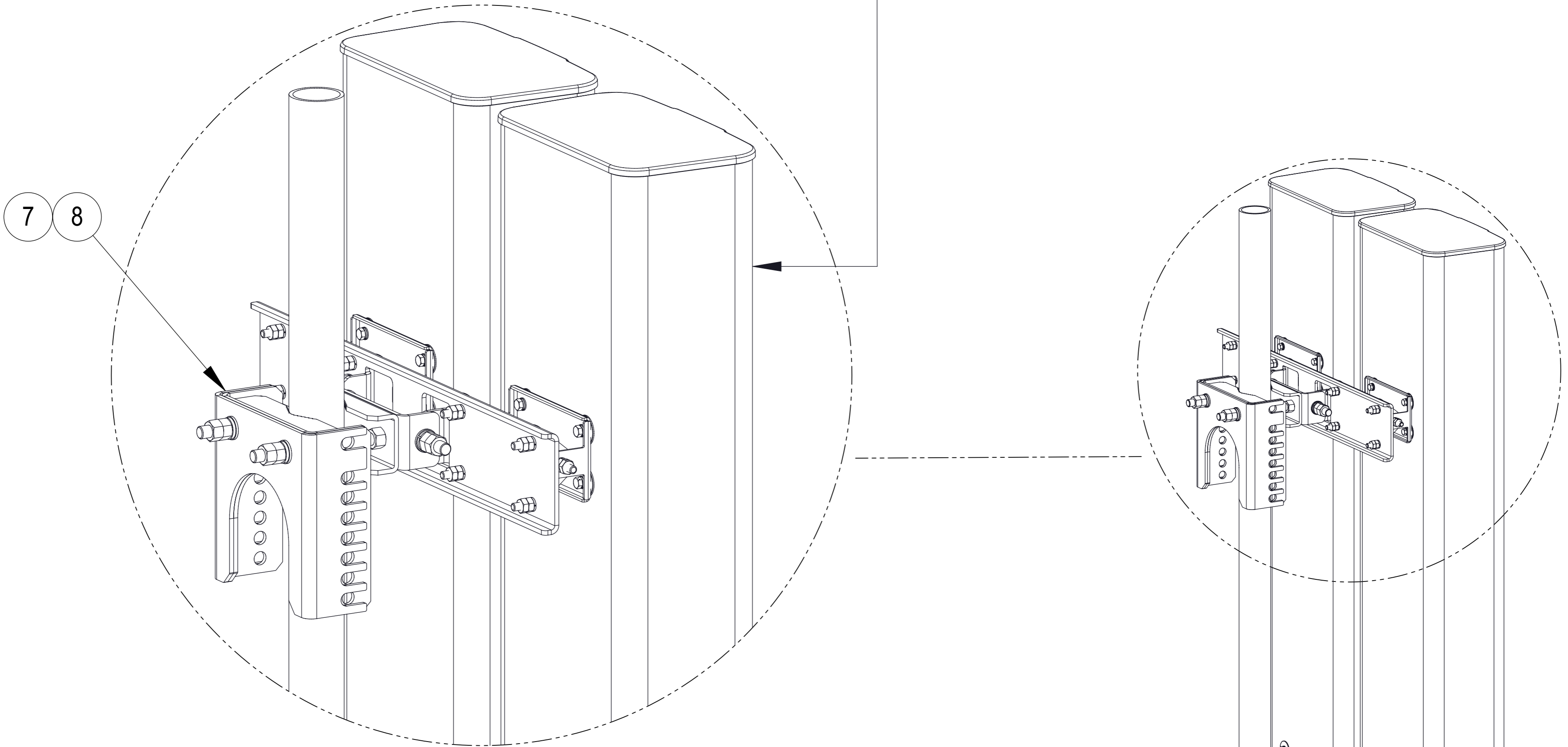
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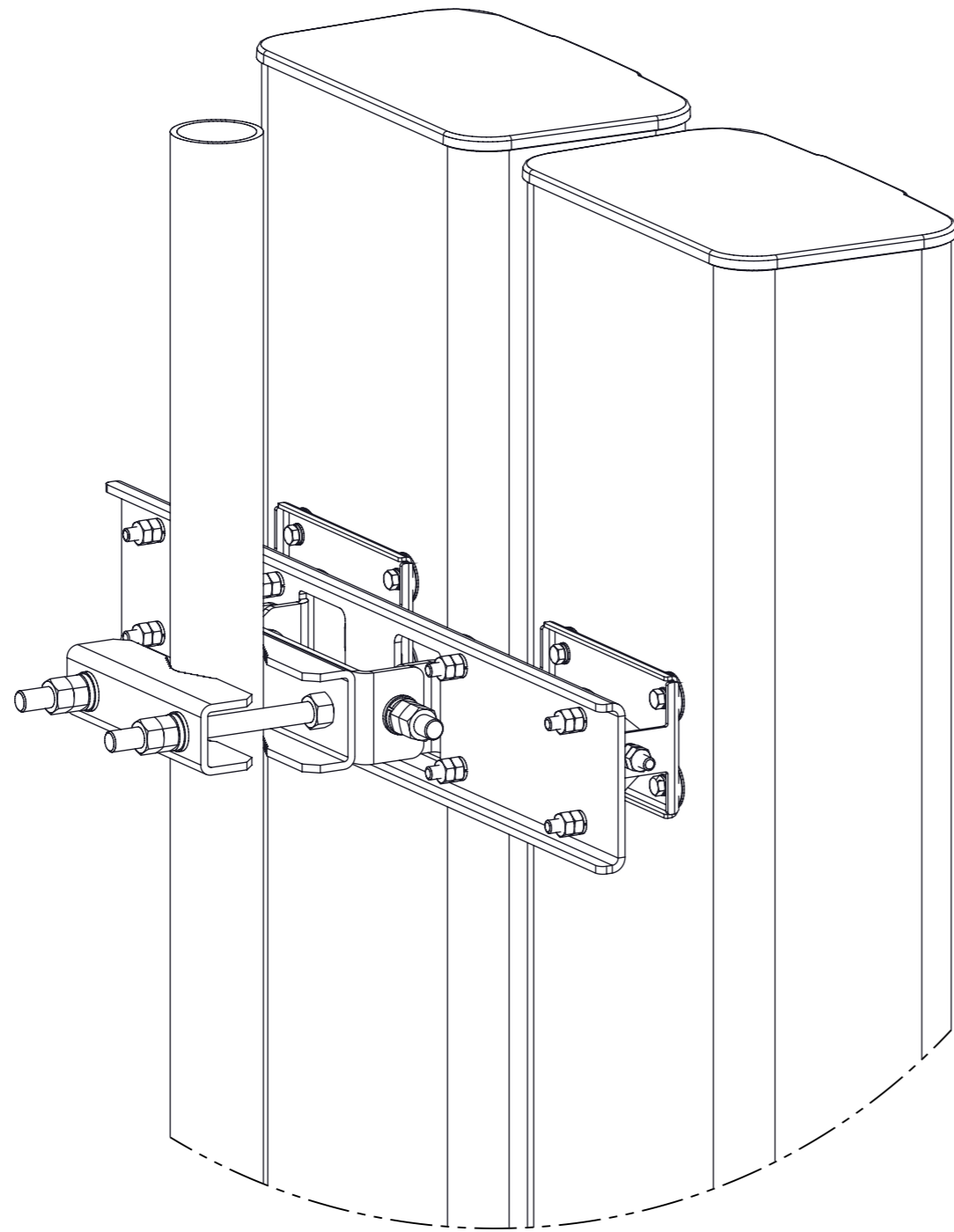
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- 6. Items 7 & 8 are only used for adjusting the downtilt.  
For 0 deg tilt, they are not used and could be stored on the mounting bracket (Item 12).

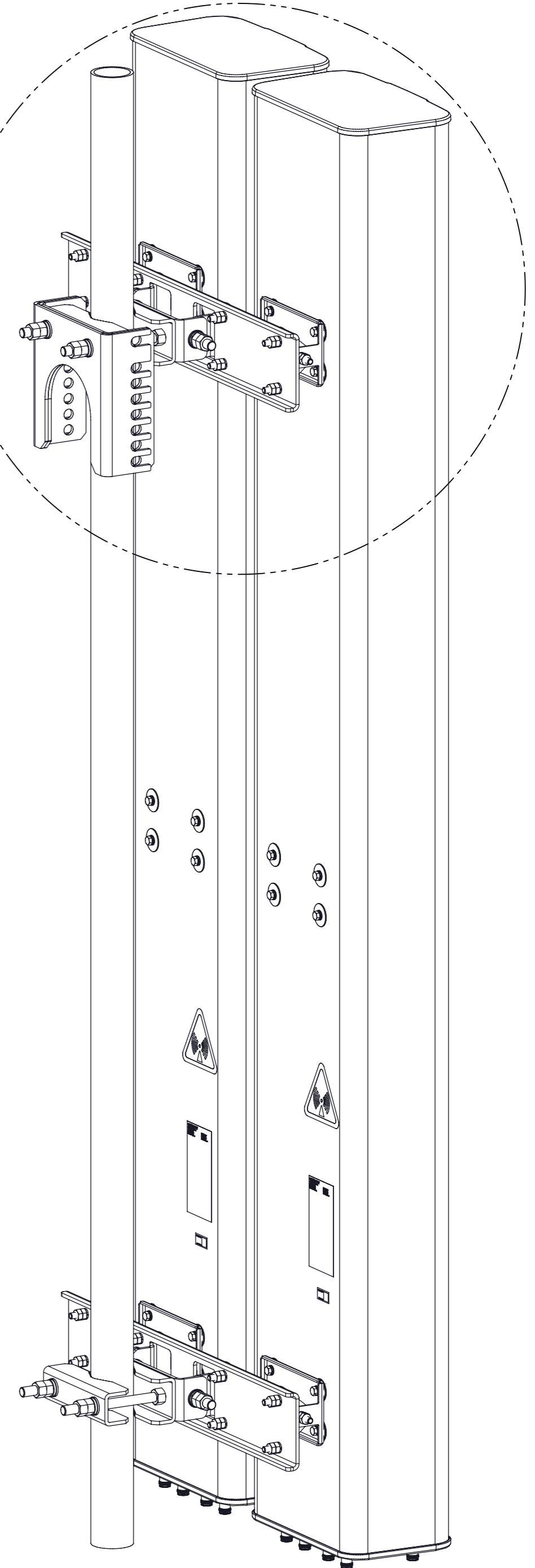
Place edge of inclinometer against edge of mounting rail ensure antenna is at 0°.



**0 DEGREE TILT VIEW  
ITEMS 7&8 ARE STORED ON THE MOUNT ASSY**



**0 DEGREE TILT VIEW  
ITEMS 7&8 NOT SHOWN**



**BSAMNT-SBS-2-2 KIT**

(continued on page 10)

(Continued from page 9)

### Remote Electrical Tilt Connection



The AISG connector fitted to the antenna is designed to accept any AISG compliant cable assembly, commscope recommends hand tightening AISG mating connector only. Applied torque to the connector shall not exceed 1.5N\*m.

### RF Cable Connection



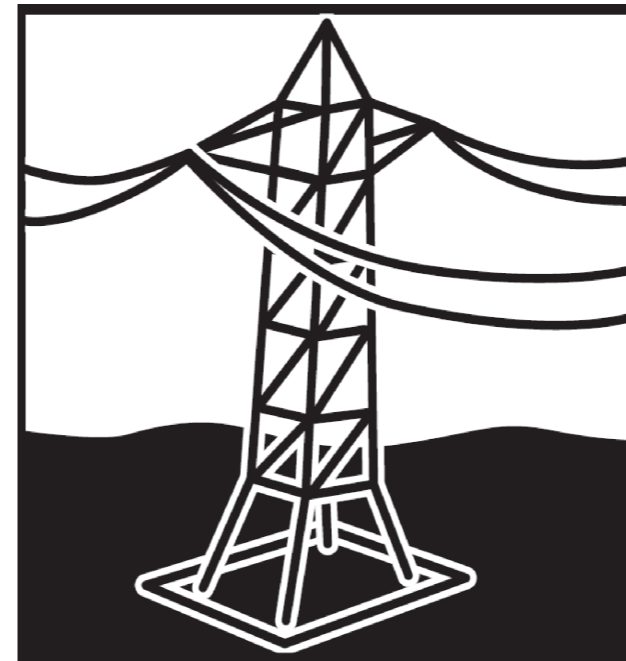
The female RF connectors fitted to the antenna are designed to fit jumper cables with standard related male RF connector. Tighten the RF connector coupling according to torque specification in antenna label, if the RF connectors are tightened beyond the recommend torque, the RF connection to the antenna may be damaged.

### SAFETY NOTICE

The installation, maintenance, or removal of an antenna requires qualified, experienced personnel. CommScope installation instructions are written for such installation personnel. Antenna systems should be inspected once a year by qualified personnel to verify proper installation, maintenance, and condition of equipment.

CommScope disclaims any liability or responsibility for the results of improper or unsafe installation practices.

It is recommended that transmit power be turned off when the field installation is performed. Follow all applicable safety precautions as shown on this page.



Do not install near power lines. Power lines, telephone lines, and guy wires look the same. Assume any wire or line can electrocute you.



Do not install on a wet or windy day or when lightning or thunder is in the area. Do not use metal ladder.



Wear shoes with rubber soles and heels. Wear protective clothing including a long-sleeved shirt and rubber gloves.