

639848 Revision G, March 2023

Side-By-Side Mounting Kit

BSAMNT-SBS-2-3

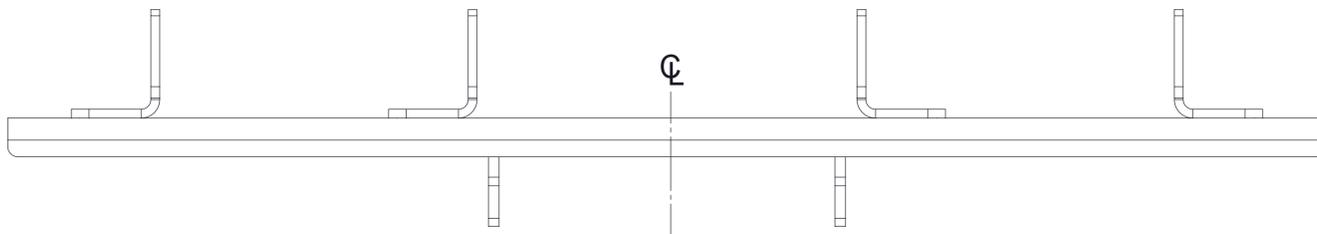
GENERAL INFORMATION

- The BSAMNT-SBS-2-3 Mounting Kit allows mounting either two 350mm wide or two 457mm wide antennas with 3 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.

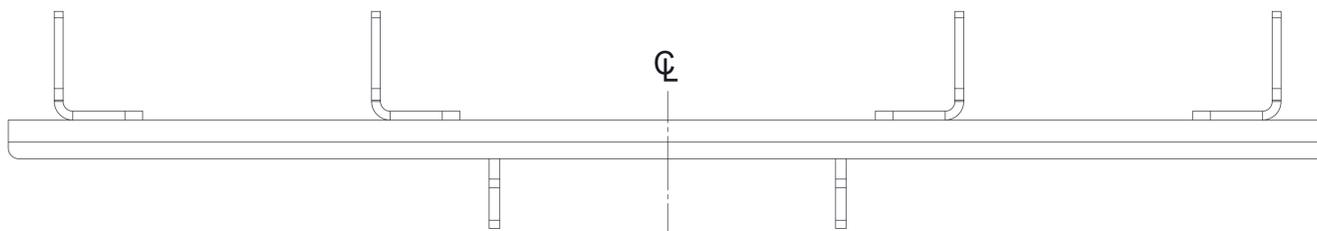
PRE-INSTALLATION INSTRUCTIONS

- 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.

350 mm (13.8") WIDE ANTENNAS

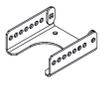
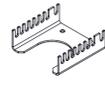


457 mm (18.0") WIDE ANTENNAS



(continued on page 2)

(Continued from page 1)

PARTS LIST			
ITEM NO.	DESCRIPTION	QTY.	IMAGE
1	PIPE MOUNTS	2	
2	BOLT,CARRIAGE,M16X65,STL,GALV	8	
3	WSHR,FLT,M16,17X30X3,STL,GALV	14	
4	WSHR,LK,SPLT,M16,STL,GALV	14	
5	NUT,HEX,M16,STL,GALV	28	
6	ARM WITH WELDING, TOP	1	
7	ARM, COVER, DEG TILT, TOP	1	
8	PLATE, BRACKET	3	
9	LINKAGE, BRACKET	12	
10	MOUNTING BRACKET, BACK, GALV	3	
11	SCR,HCS,HEX,M10X40,STL,GALV	36	
12	WSHR,LK,SPLT,M10,STL,GALV	36	
13	NUT,HEX,M10,STL,GALV	72	
14	WSHR,FLT,M10,10.5X20X2,STL,GALV	36	
15	PIPE MOUNTS, MIDDLE	1	

BOLT DIAMETER	TORQUE
M10	37 N.m (27 ft. lbs)
M16	96 N.m (71 ft. lbs)



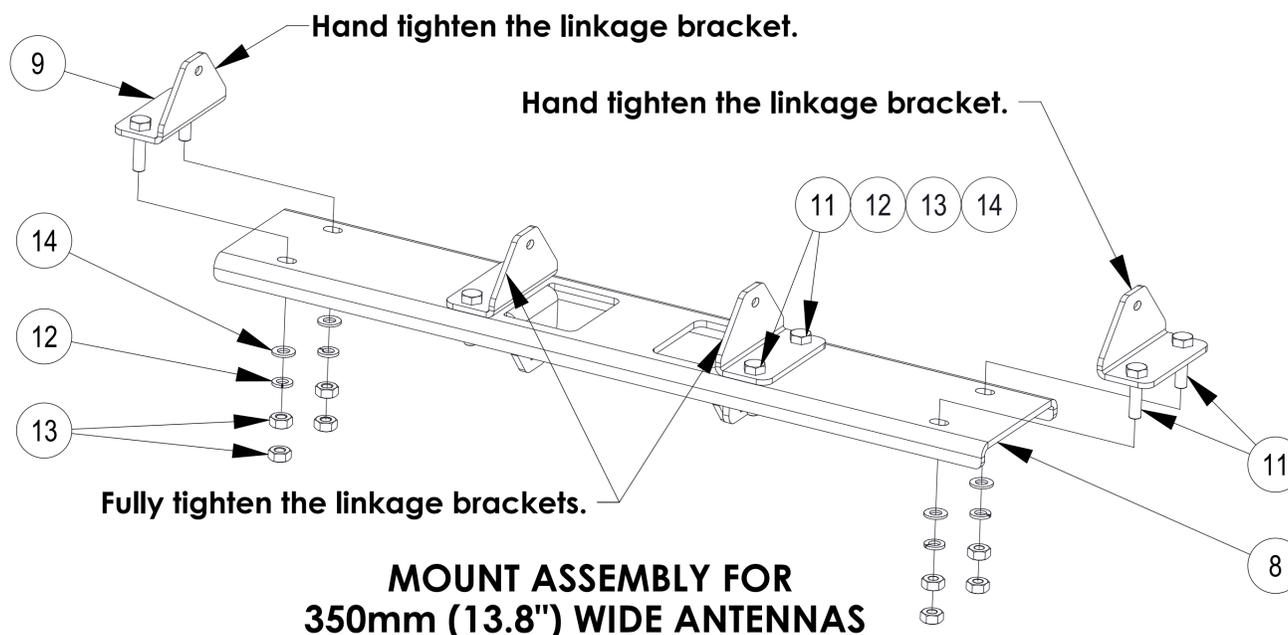
All fasteners must be tightened to the defined torque value after onsite installation to the specified tilt position, including installation at 0-degree, see the mounting kit installation diagrams on the following pages for the correct torque recommendations.

(continued on page 3)

(Continued from page 2)

(Note: These instructions are for 350 mm (14 inch) wide antennas. For 457 mm (18 inch) wide antennas, see page 4.

Step 1 (350 mm): Hand tighten the linkage bracket (ITEM 9) onto plate bracket (Item 8) using M10 screws, lock washers, flat washer and nuts (Items 11, 12, 14 &13). The direction of linkage brackets (Item 9) is different for 457mm wide antennas.

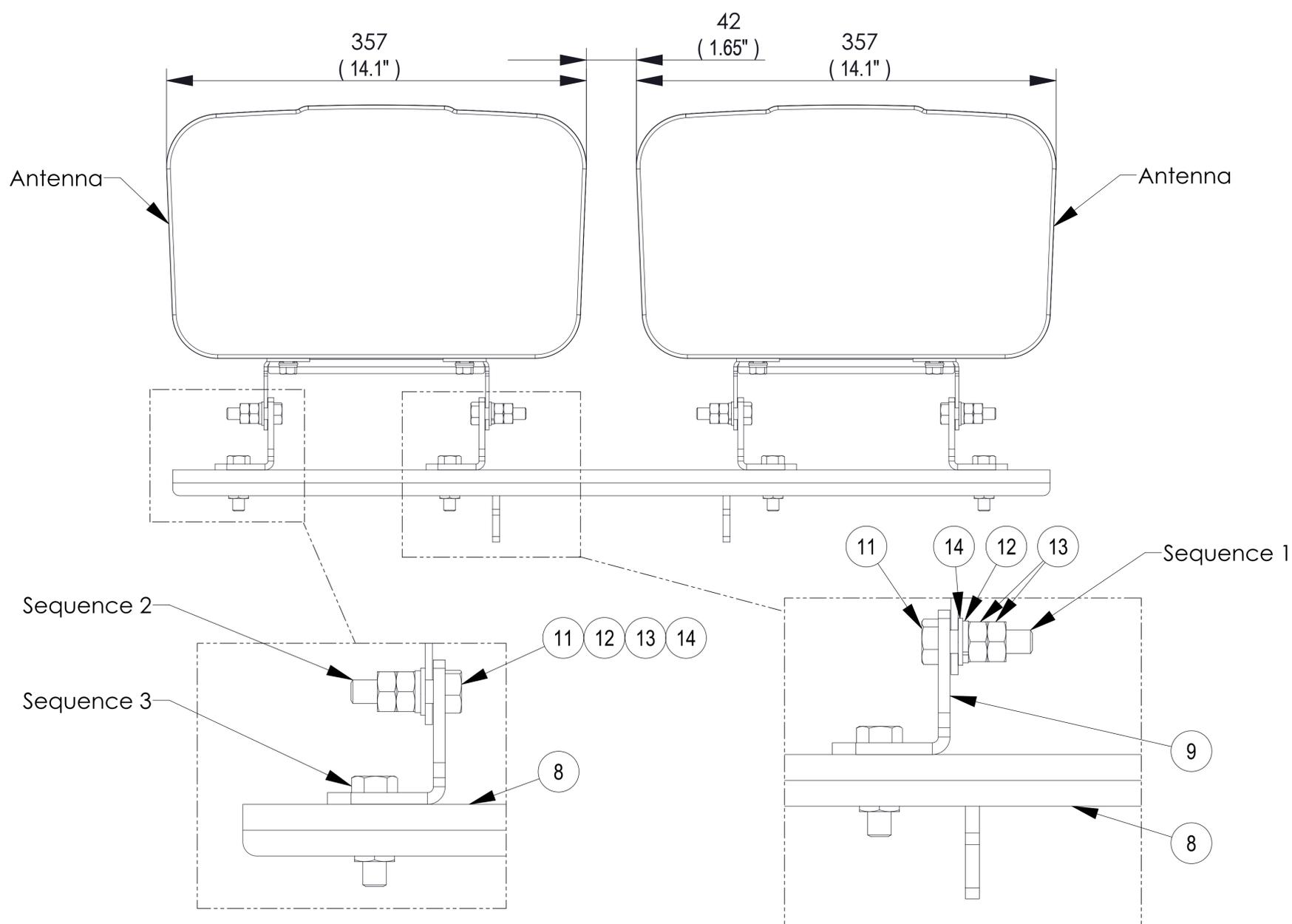


Step 2: Keep the antenna parallel.

- (1) Assemble an antenna on the middle linkage bracket (Item 9) using M10 screws, lock washers, flat washers and nuts (Items 11, 12, 14 &13). Hand tighten these nuts (Item 13). See sequence 1.
- (2) Assemble the antenna on the side linkage bracket (Item 9) using M10 screws, lock washers, flat washers and nuts (Items 11, 12, 14 &13). Hand tighten these nuts (Item 13). 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.



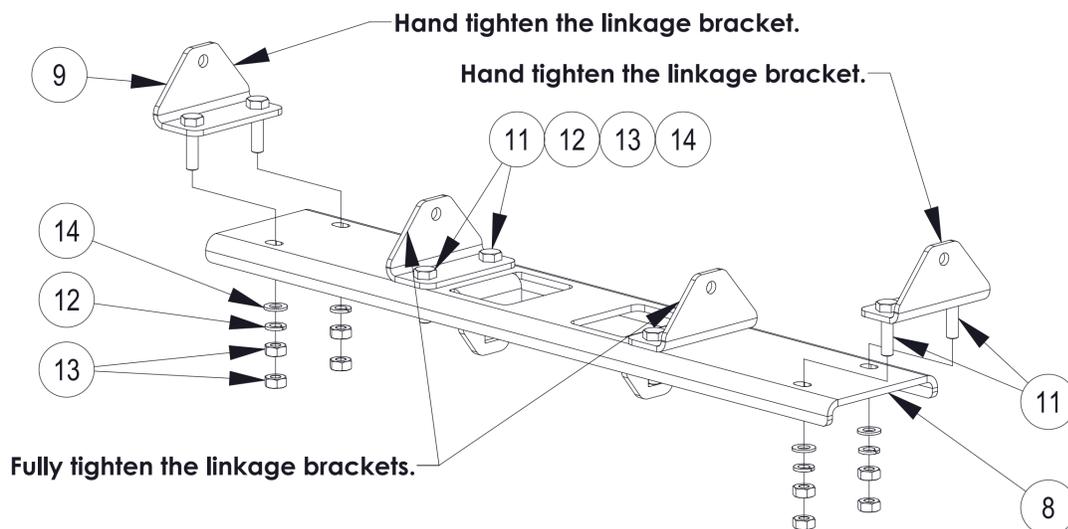
BOLT DIAMETER	TORQUE
M10	37 N.m (27 ft. lbs)

(continued on page 4)

(Continued from page 3)

(Note: These instructions are for 457 mm (18 inch) wide antennas. For 350 mm (14 inch) wide antennas, see page 3.

Step 1 (457 mm): Hand tighten the linkage bracket (item 9) onto plate bracket (Item 8) using M10 screws, lock washers, flat washer and nuts (Items 11, 12, 14 &13). The direction of linkage brackets (item 9) is different for the 350 mm wide antennas.

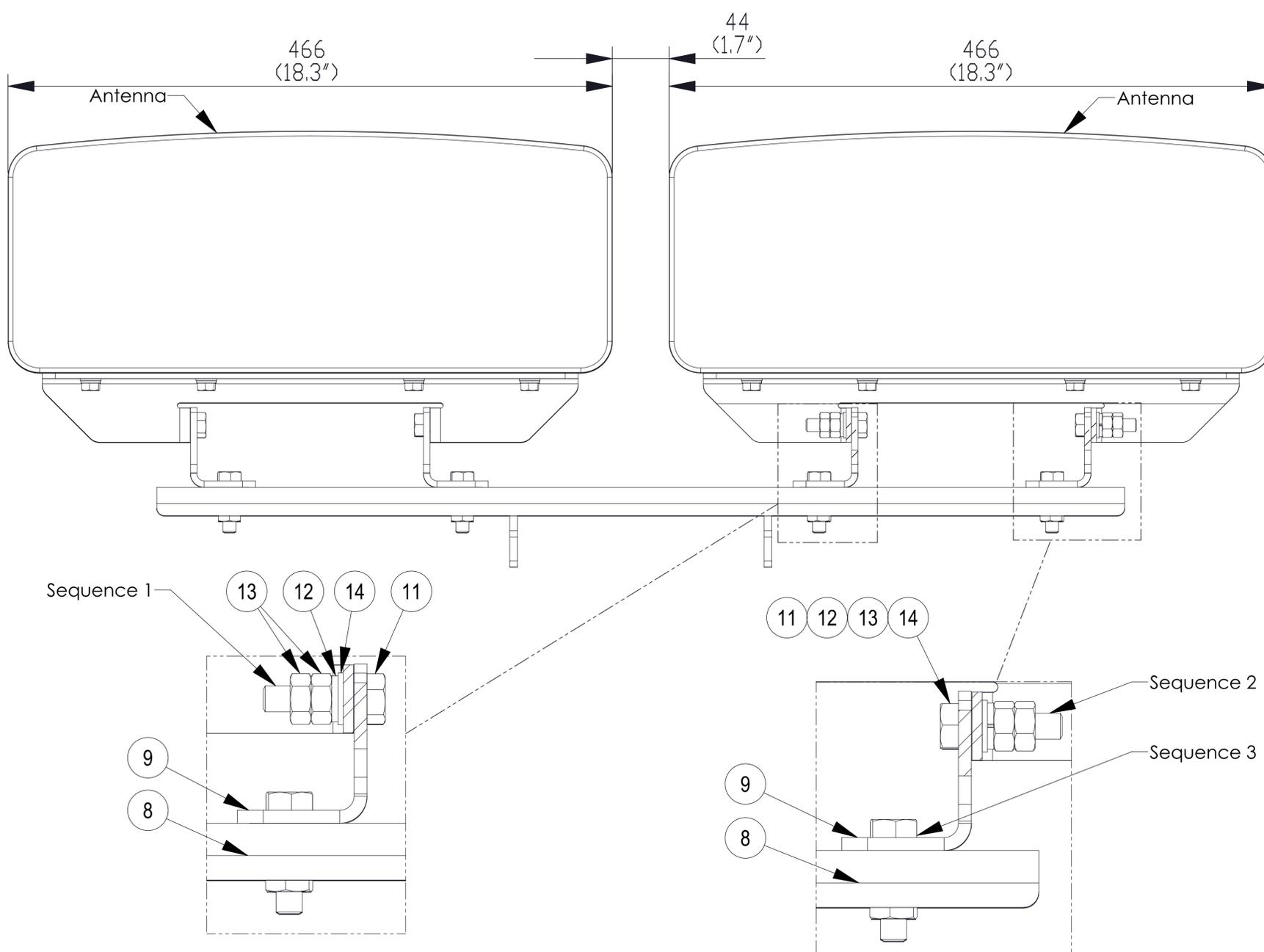


MOUNT ASSEMBLY FOR 457mm (18.0") WIDE ANTENNAS

Step 2: Keep the antenna parallel.

- (1) Assemble an antenna on the middle linkage bracket (Item 9) using M10 screws, lock washers, flat washers and nuts (Items 11, 12, 14 &13). Hand tighten these nuts (Item 13). See sequence 1.
- (2) Assemble the antenna on the side linkage bracket (Item 9) using M10 screws, lock washers, flat washers and nuts (Items 11, 12, 14 &13). Hand tighten these nuts (Item 13). See sequence 2.
- (3) Repeat the sequences 1 & 2 to install another antenna.
- (4) Keep antenna with plate (Item 8) parallel. Then fully tighten all nuts.

After top bracket plate is installed, repeat step 2 for the bottom bracket plate and middle bracket plate. When brackets properly installed the gap between antenna and caps should be 44 mm (1.7") as shown.



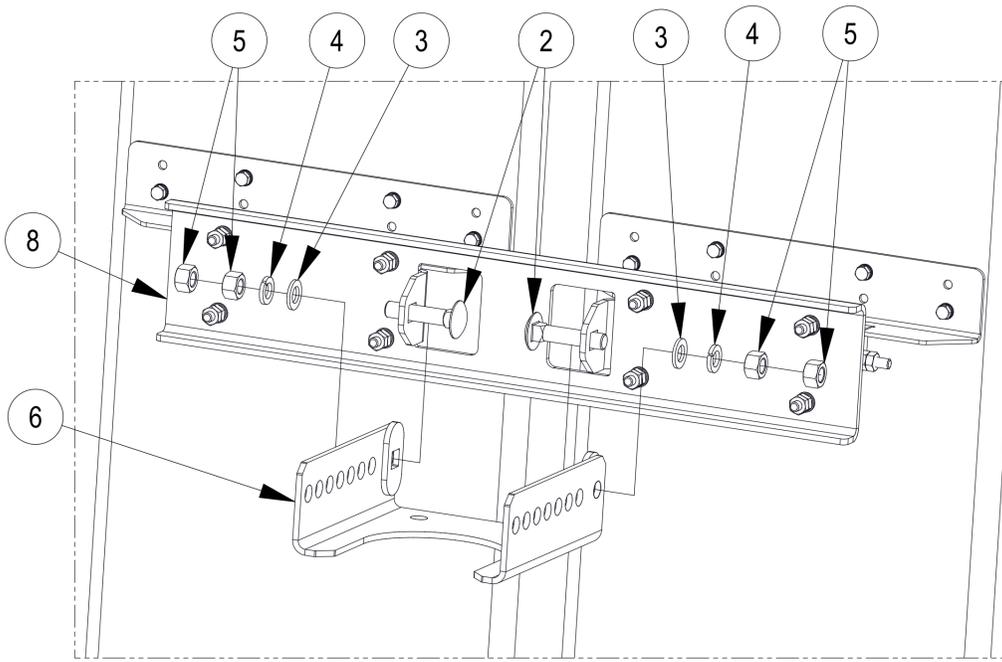
MOUNT ASSEMBLY FOR 457mm (18.0") WIDE ANTENNAS

BOLT DIAMETER	TORQUE
M10	37 N.m (27 ft. lbs)

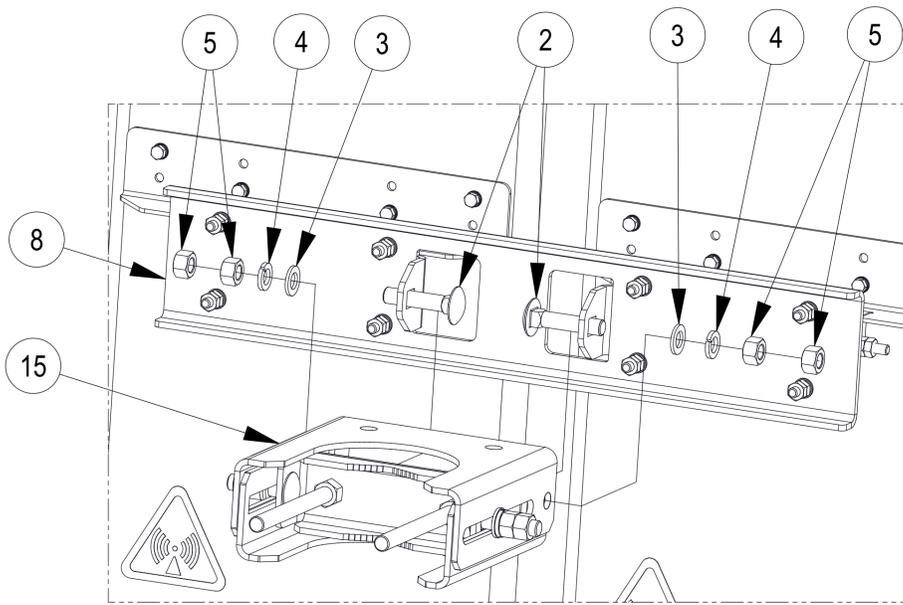
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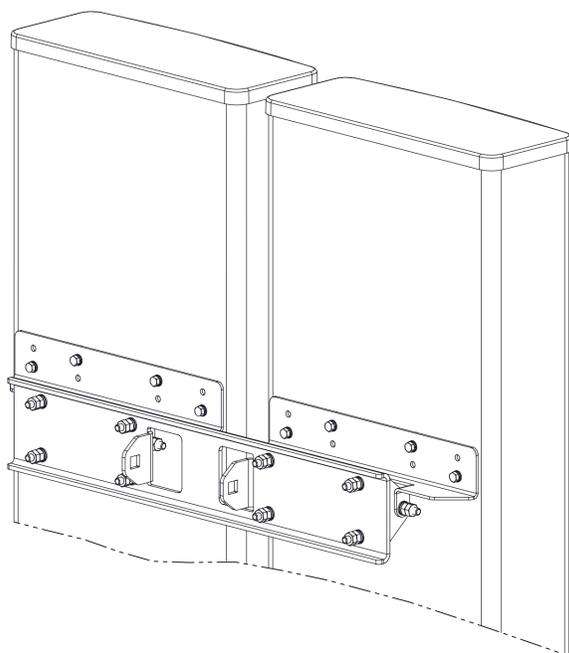
2. Attach top arm with welding (Item 6) to top bracket plate (Item 8) using M16 carriage bolt (Item 2), flat washer, lock washer and M16 nut (Items 3, 4 & 5). Hand tighten them on 2 places.
 Attach middle pipe mount (Item 15) to middle bracket plate (Item 8) using M16 carriage bolt (Item 2), flat washer, lock washer and M16 nut (Items 3, 4 & 5). Hand tighten them on 2 places.
 The top arm with welding (Item 6) won't be installed if the antenna is 0 deg downtilt.
 See 0 degree tilt view as illustrated on sheet 10.



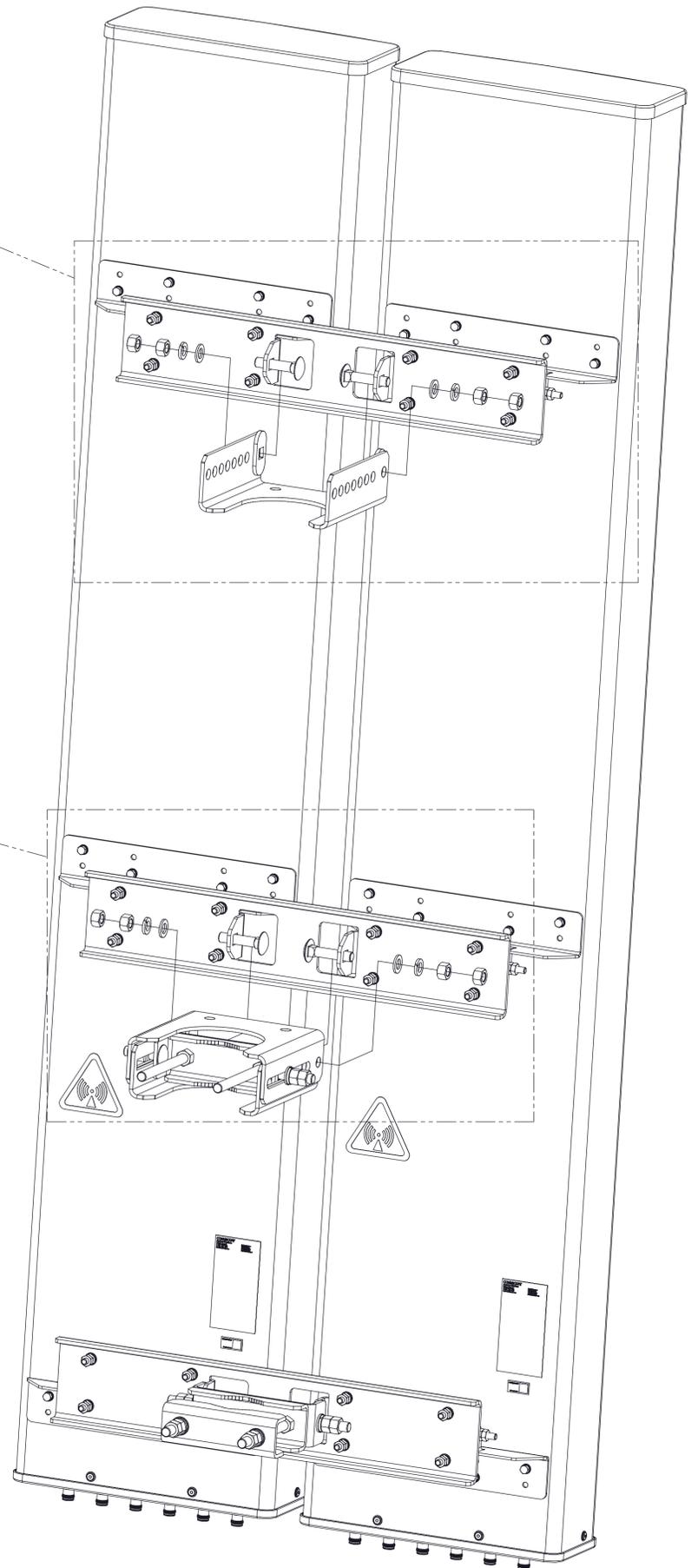
Mount Assembly, Top



Mount Assembly, Middle



0 DEGREE TILT VIEW



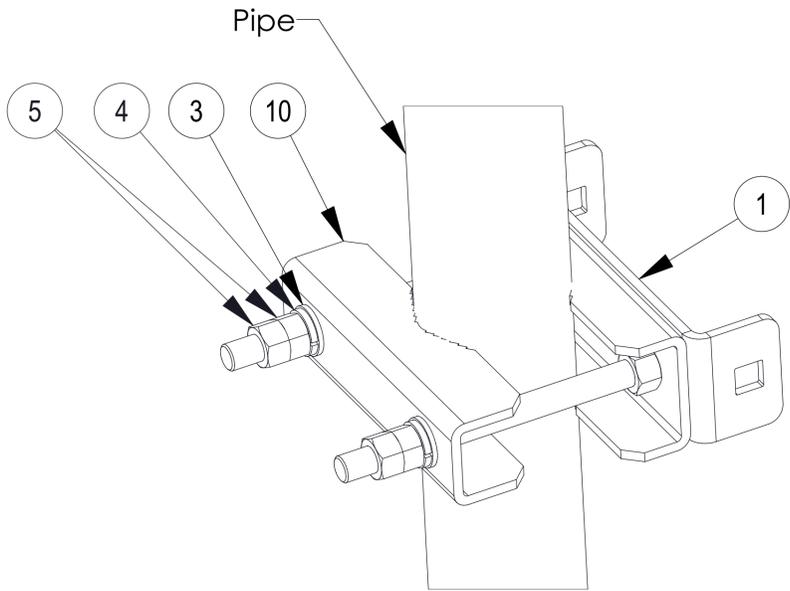
BSAMNT-SBS-2-3 KIT

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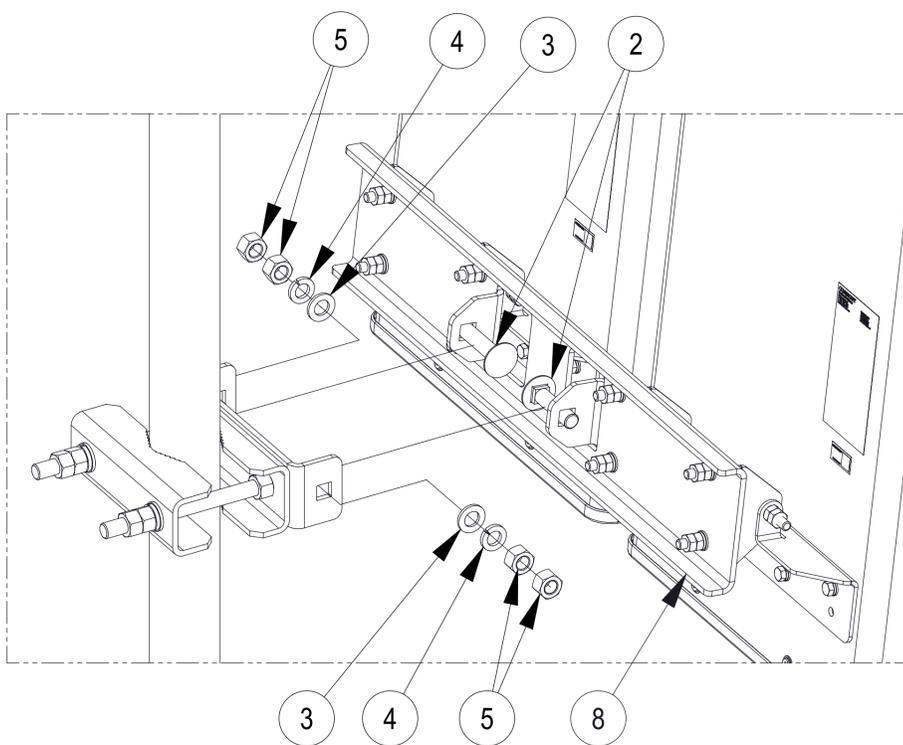
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3. Attach mount assembly, bottom to the mounting bracket, bottom as shown.

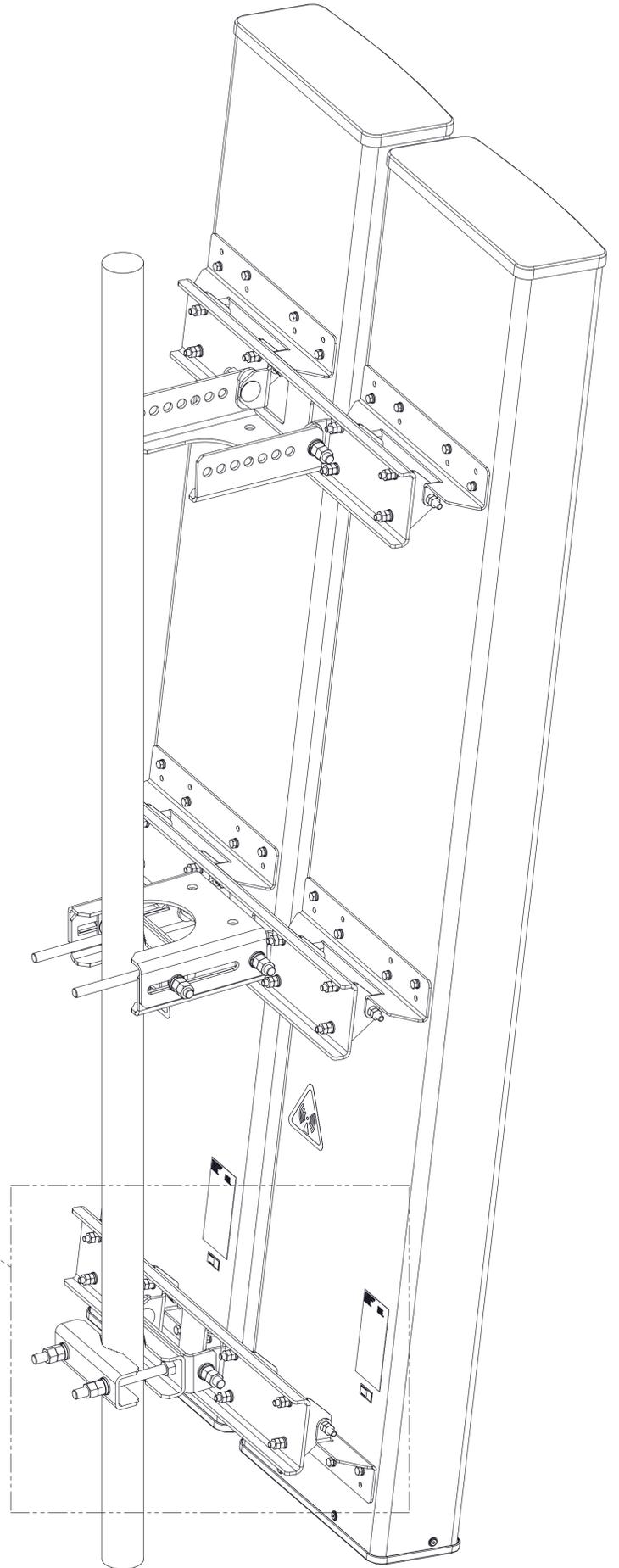
Step 1: **Secure pipe mounts (Item 1) and mounting bracket (Item 10) on pipe using flat washer, lock washer and M16 nut (Items 3, 4 & 5).**



Step 2: **Secure antenna with plate (Item 8) on pipe mounts (Item 1) using M16 carriage bolt (Item 2), flat washer, lock washer and M16 nut (Items 3, 4 & 5). Hand tighten them on 2 places.**



Mount Assembly, Bottom



BSAMNT-SBS-2-3 KIT

BOLT DIAMETER	TORQUE
M16	96 N.m (71 ft. lbs)

(continued on page 7)

(Continued from page 6)

- Secure pipe mounts (Items 1 & 15) and mounting bracket (Item 10) on pipe using flat washer, lock washer and M16 nut (Items 3, 4 & 5). The biggest downtilt degree is 7°.

An inclinometer or other angular measuring device may be used to verify downtilt angle as required.

Step 1: Secure antenna with plate (Item 8) and middle pipe mounts (Item 15) on pipe mounts (Item 1).

- Use M16 carriage bolt (Item 2) and flat washer, lock washer & M16 nut (Items 3, 4 & 5).
- Hand tighten M16 nuts (Item 5).

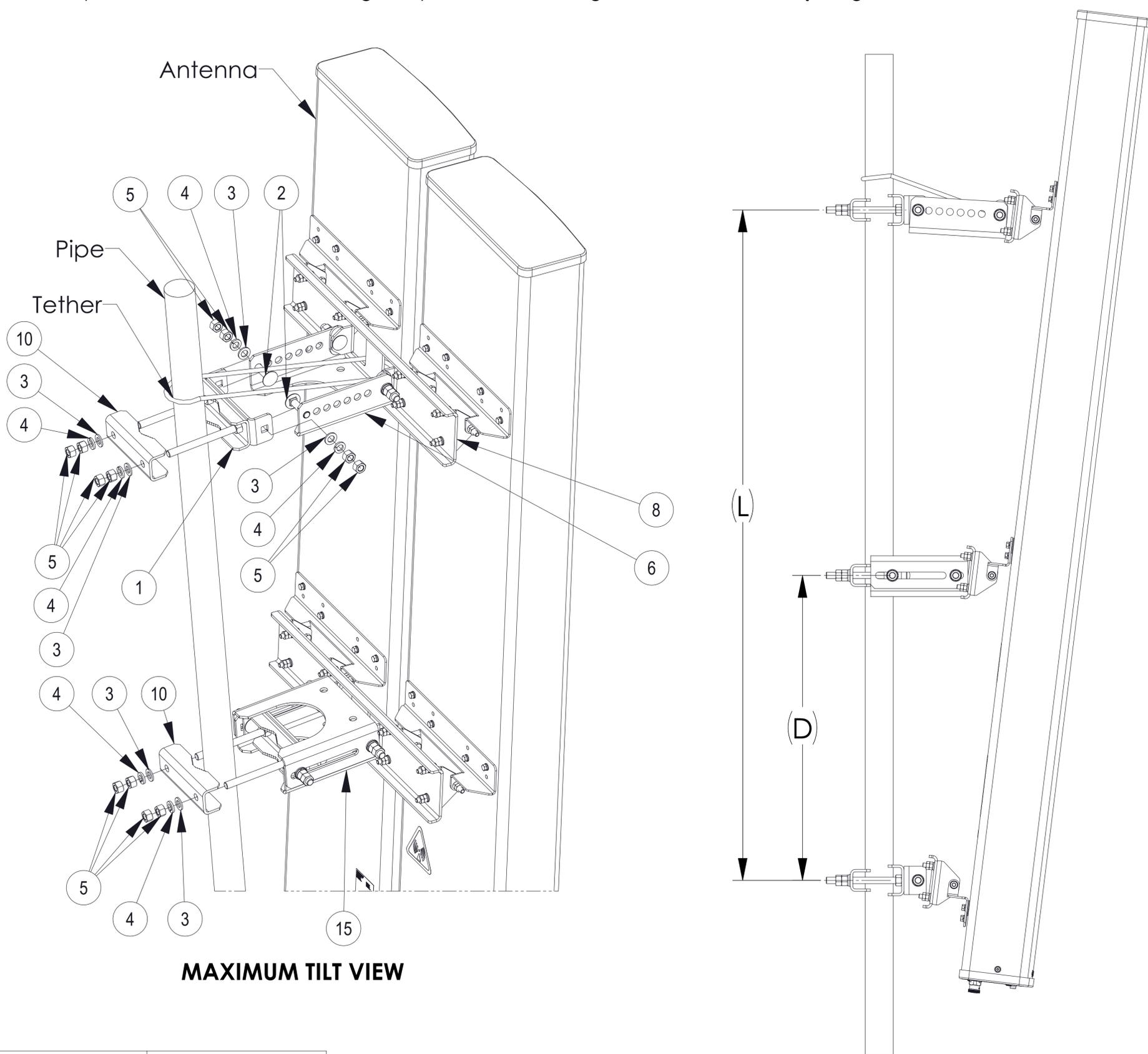
Step 2: Secure antenna with plate (Item 8) and arm with welding (Item 6) on pipe mounts (Item 1).

- Use a tether to secure the antenna hoisting eye to the mounting structure on the top side.
- Use M16 carriage bolt (Item 2) and flat washer, lock washer & M16 nut (Items 3, 4 & 5).
- Adjust the correct tilt and use M16 carriage bolt (Item 2) and flat washer, lock washer & M16 nut (Items 3, 4 & 5).
- Hand tighten M16 nuts (Item 5).

Make sure the distance "L" = The distance between mounting plates on the antenna.
Make sure the distance "D" = 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-2-3 KIT

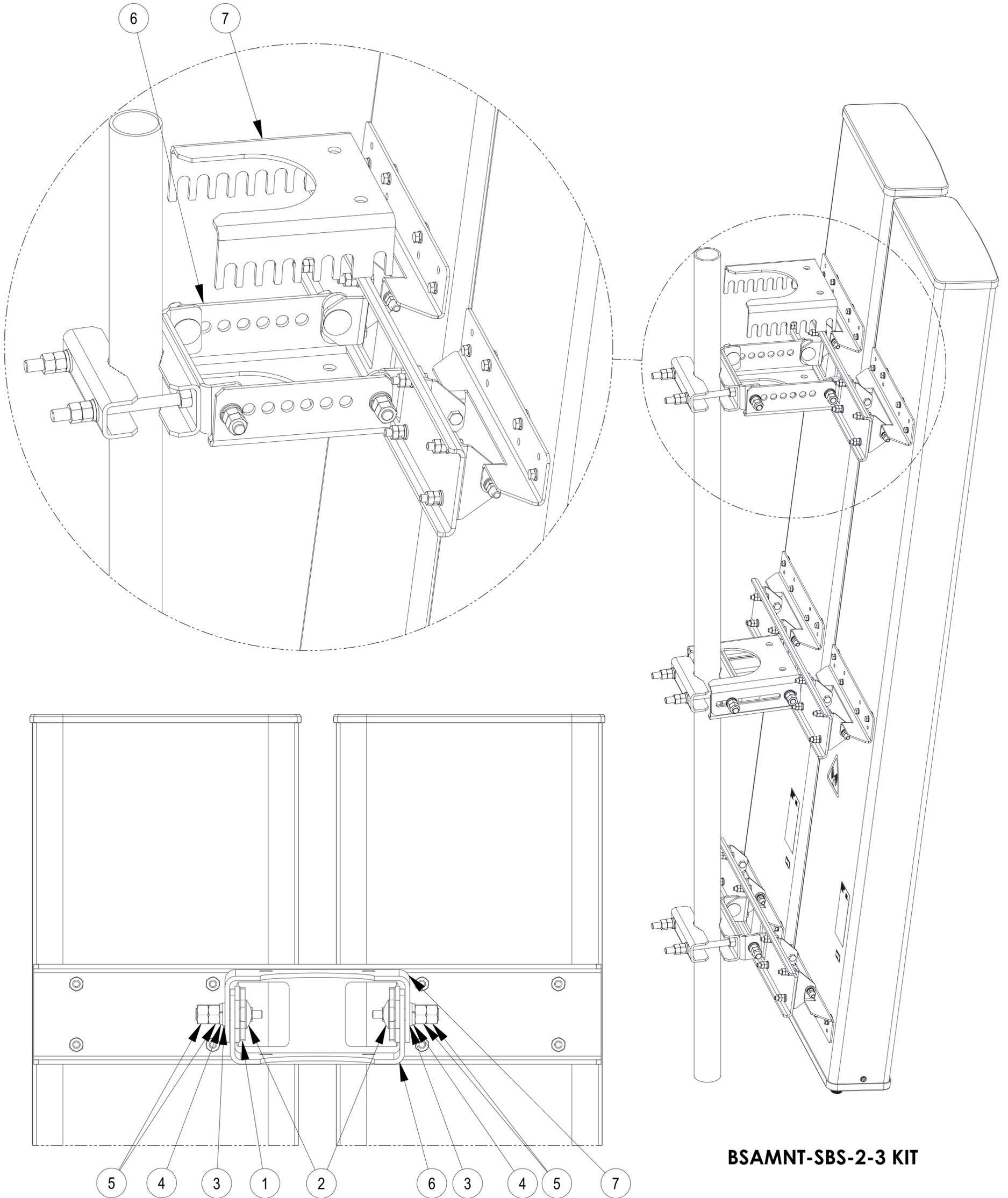
BOLT DIAMETER	TORQUE
M16	96 N.m (71 ft. lbs)

(continued on page 8)

(Continued from page 7)

5. Install arm cover (Item 7) onto arm with welding (Item 6).
Fully tighten all M16 nuts (Item 5).

BOLT DIAMETER	TORQUE
M16	96 N.m (71 ft. lbs)

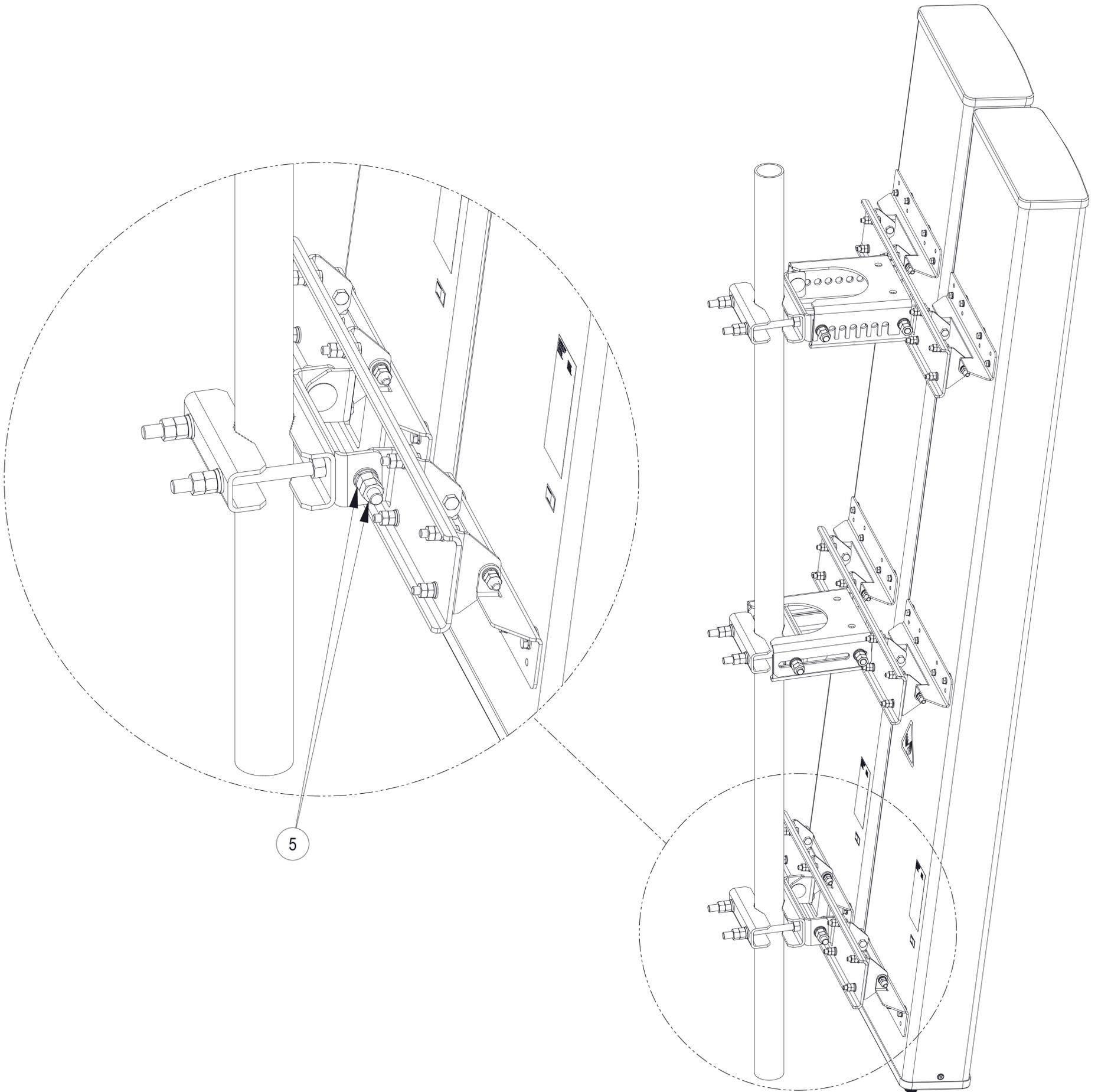


BSAMNT-SBS-2-3 KIT

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



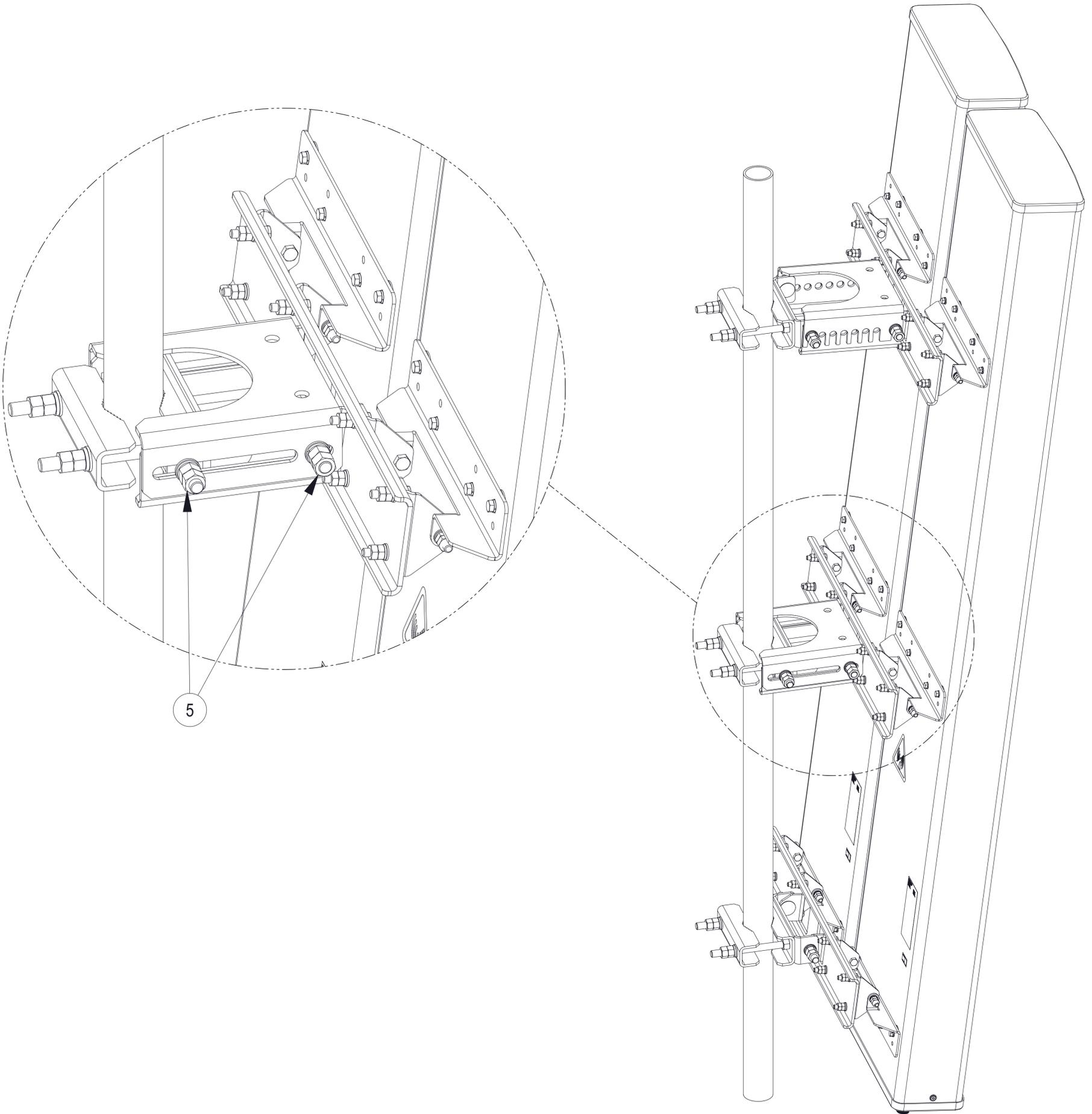
BSAMNT-SBS-2-3 KIT

BOLT DIAMETER	TORQUE
M16	96 N.m (71 ft. lbs)

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



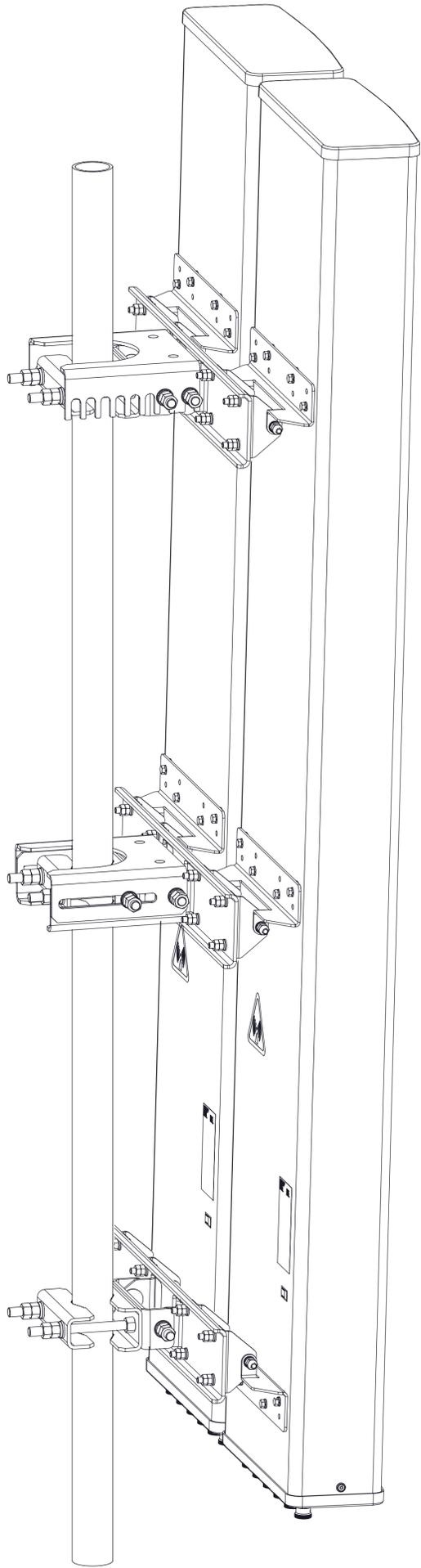
BSAMNT-SBS-2-3 KIT

BOLT DIAMETER	TORQUE
M16	96 N.m (71 ft. lbs)

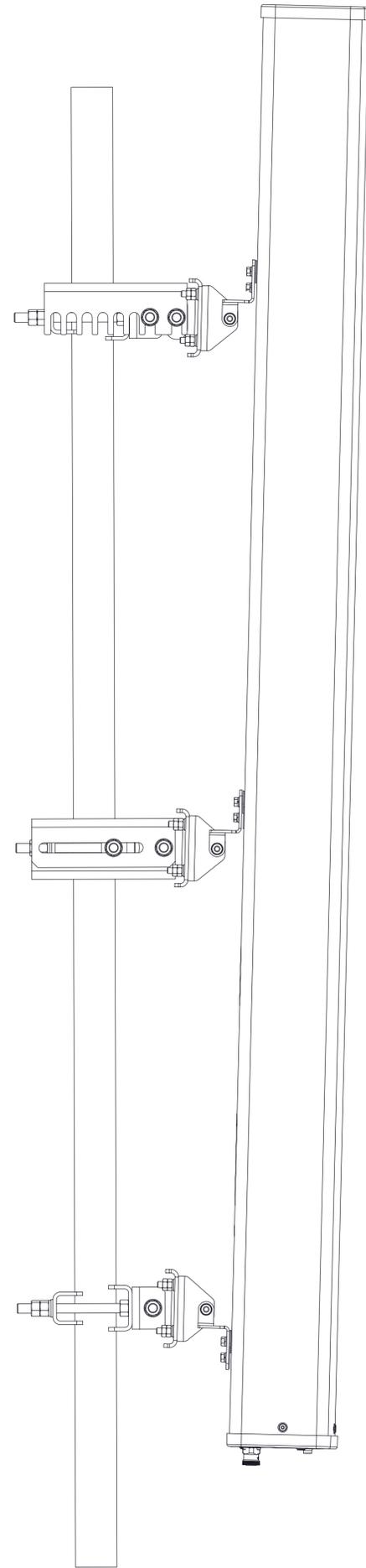
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8. The smallest downtilt degree is 1.5°.



TILT VIEW



BSAMNT-SBS-2-3 KIT

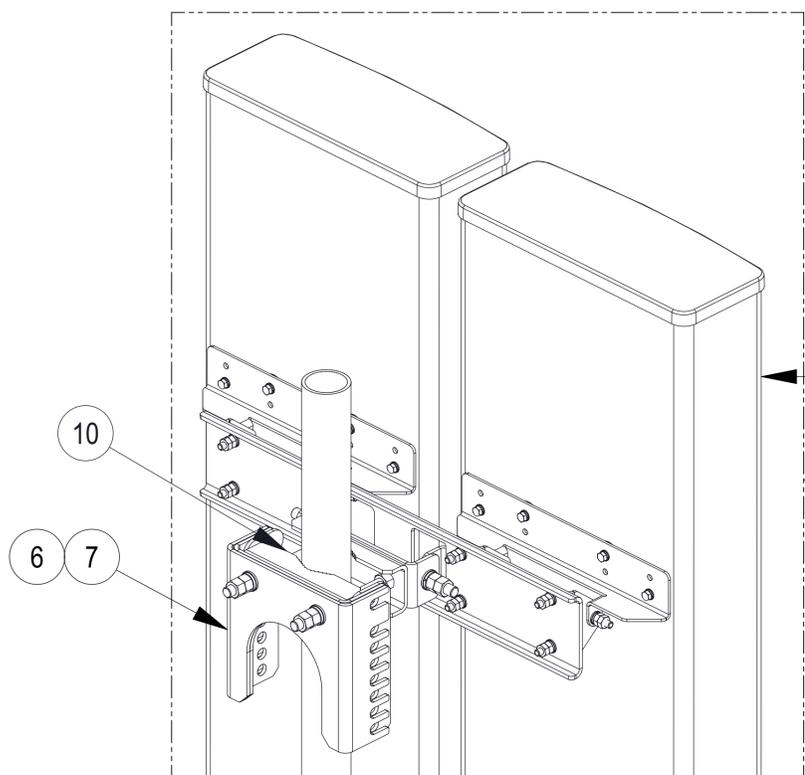
BOLT DIAMETER	TORQUE
M16	96 N.m (71 ft. lbs)

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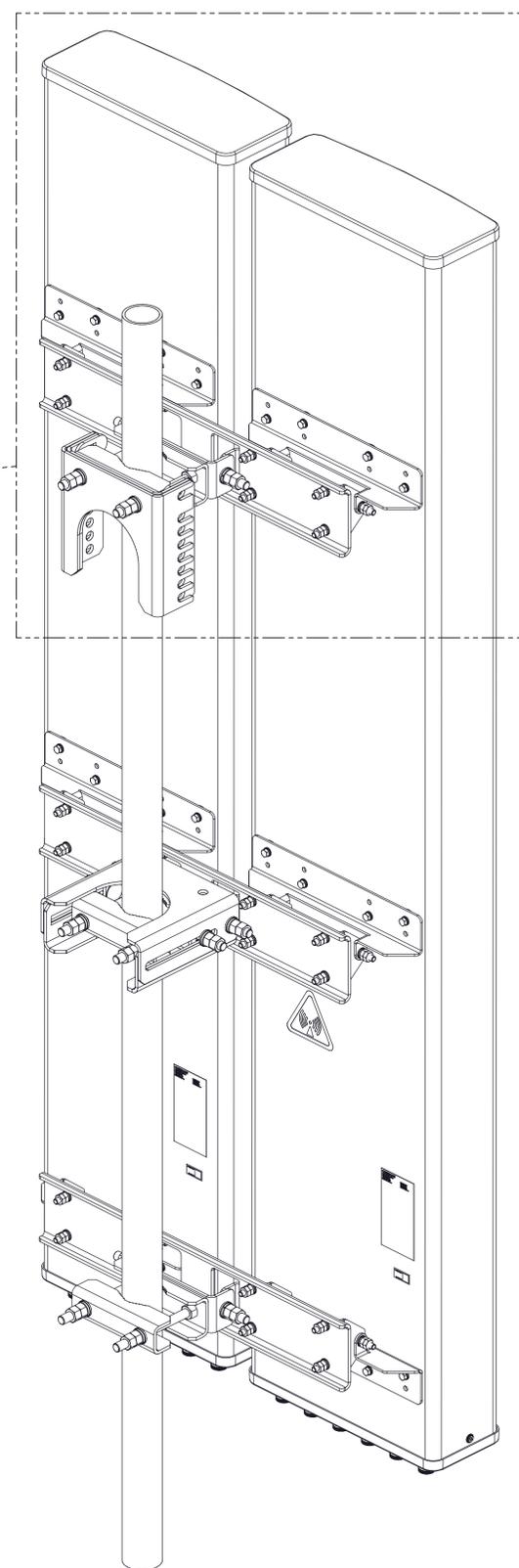
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9. Items 6 & 7 are only used for adjusting the downtilt.
For 0 deg tilt, they are not used and could be stored on the mounting bracket (Item 10).

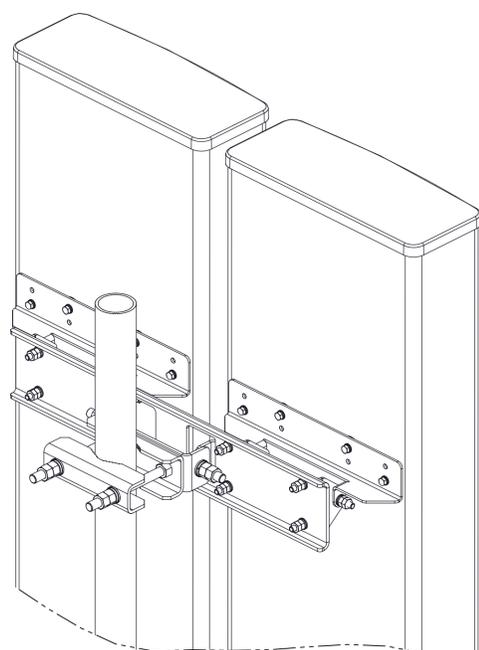
Place edge of inclinometer against edge of mounting rail ensure antenna is at 0°.



**MINIMUM TILT VIEW
ITEMS 6 & 7 ARE STORED ON THE MOUNT ASSY**



BSAMNT-SBS-2-3 KIT



**MINIMUM TILT VIEW
ITEMS 6 & 7 NOT SHOWN**

(continued on page 13)

(Continued from page 12)

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.