# **COMMSCOPE®**

# Instruction Sheet

### P040-0078 Revision A. July 2023 Side-By-Side Mounting Kit

BSAMNT-SBS-3-2

### **GENERAL INFORMATION**

- The BSAMNT-SBS-3-2 Mounting Kit allows mounting either two 498mm wide or 498mm with 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**

- $\cdot$  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.
- $\cdot$  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.
- $\cdot$  Position the antennas so that the drain holes are directed down toward the ground.

### TORQUE

BOLT DIAMETER	TORQUE

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

### **PARTS LIST**

ITEM NO.	DESCRIPTION	QTY.	IMAGE
1	PIPE MOUNTS	2	
2	BOLT,CARRIAGE,M16X65,STL,GALV	6	
3	WSHR,FLT,M16,17X30X3,STL,GALV	10	
4	WSHR,LK,SPLT,M16,STL,GALV	10	
5	NUT,HEX,M16,STL,GALV	20	
6	ARM WITH WELDING, TOP	1	000000
7	ARM, COVER, DEG TILT, TOP	1	Munn 1
8	PLATE, BRACKET	2	
9	LINKAGE, BRACKET	8	
10	MOUNTING BRACKET, BACK, GALV	2	e
11	SCR,HCS,HEX,M10X40,STL,GALV	24	Co o
12	WSHR,LK,SPLT,M10,STL,GALV	24	
13	NUT,HEX,M10,STL,GALV	48	<u>O</u>
14	WSHR,FLAT,M10,10.5X20X2,STL,GALV	24	$\bigcirc$



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)

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(Continued from page 1)

### Steps to mount two 498mm wide antennas: Step 1: Hand tighten the linkage bracket (ITEM 9) onto plate bracket (Item 8) using M10 screws, lock washers, flat washer and nuts (Items 11, 12, 13 & 14). 9) (Hand tighten the linkage bracket) (12)(13)(14) 11 ) 14 (Hand tighten the linkage bracket) 9 12 13 11 (Fully tighten the linkage brackets) (9 8 **MOUNT ASSEMBLY** 498mm(19.61") wide antennas

Step 2: Keep the antenna parallel.

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

and nuts (ITEMS 11, 14, 12 & 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.

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 53 mm (2.08 ") as shown.



(continued on page 3)

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### (Continued from page 2)

### Steps to mount 498mm with 457mm wide antennas:

Step 1: Hand tighten the linkage bracket (P155-0103-1) onto plate bracket (Item 8) using M10 screws, flat washer , lock washers and nuts (Items 11, 14, 12 & 13).

P155-0103-1 (DIFFERENTIAL MNT, LINKAGE BRACKET) 8 gty needs to be ordered separately to mount a 2 point 498mm wide with 2 point 457mm wide antenna. Refer Installation instruction P040-0082-1 for details regarding antenna mountings with P155-0103-1 bracket.



Step 2: Keep the antenna parallel.

- (1) Assemble an antenna on the middle linkage bracket P155-0103-1 using M10 screws ,flat washers, lock washers, and nuts (Items 11, 14, 12 & 13). Hand tighten these nuts (Item 13). See sequence 1
- (2) Assemble the antenna on the side linkage bracket P155-0103-1using M10 screws, flat washers, lock washers, and nuts (Items 11, 14, 12 & 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.

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 73 mm (2.8") as shown.



(continued on page 4)

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(Continued from page 3)

Steps to use mechanical tilt brackets:

Attach top arm with welding (Item 6) to top plate bracket (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 and carriage bolt (Items 6 & 2) won't be installed if the antenna is 0 deg downtilt. See 0 degree tilt view as illustrated on sheet 9.



### **0 DEGREE TILT VIEW**

(continued on page 5)

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Page 4 of 10

(Continued from page 4)

2. Attach pipe mount assembly, to the mounting bracket, at bottom mount point location as shown below.

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.



**BSAMNT-SBS-3-2 KIT** 

Mount Assembly, Bottom Explode view

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

(continued on page 6)

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(Continued from page 5)

3. Secure pipe mounts (Item 1) and mounting bracket (Item 10) on pipe using flat washer, lock washer and M16 nut (Items 3, 4 & 5). Torque value for M16 fasteners is 96 N.m (71 ft. lbs)

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

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

### 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-3-2 KIT**

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

(continued on page 7)

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(Continued from page 6)

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





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

(continued on page 8)

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(Continued from page 7)

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



**BSAMNT-SBS-3-2 KIT** 

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

(continued on page 9)

P040-0078

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(Continued from page 8)



P040-0078



**0 DEGREE TILT VIEW ITEMS 6&7 NOT SHOWN**  **BSAMNT-SBS-3-2 KIT** 

### (continued on page 10)

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(Continued from page 9)





### <u>SAFETY NOTICE</u>

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 longsleeved shirt and rubber gloves.

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